USDA United States Department of Agriculture

Natural Resources Conservation Service

Idaho Water Supply Outlook Report

April 1, 2025

Snow surveyor Justin Byington works to clear a snow plug out of the precipitation can at Deadwood Summit SNOTEL site. Photo courtesy of Earl Adsley

For several days the battery voltage at the Deadwood Summit SNOTEL station dropped lower and lower. Without battery power, the site would no longer be able to transmit the critical snowpack data users rely on. On March 4, snow surveyors Earl Adsley and Justin Byington snowmobiled more than 60 miles to reach the site. They found the shelter and solar panels completely buried by snow! The precipitation levels in the precipitation can also had not been rising in concert with winter storms because it had been plugged with snow during the last large storm event. Plug events are common during the winter when heavy snowfall occurs. Usually, they drop on their own accord and the data are corrected to reflect when the precipitation occurred and not when the plug dropped. Justin is seen here using his avalanche probe to loosen the snow plug and unclog the precipitation can.

Water Supply Outlook Report
Federal - State – Private Cooperative Snow Surveys

For more water supply and resource management information:

Contact: Your local county Natural Resources Conservation Service Office
https://www.nrcs.usda.gov/idaho/snow-survey
Natural Resources Conservation Service Snow Surveys
9173 West Barnes Drive, Suite C
Boise, Idaho 83709-1574 (208) 378-5700 ext. 5

Please contact us by email at: IDBOISE-NRCS-SNOW@usda.gov

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when the snow melts. Measurements of snow water equivalent at selected manual snow courses and automated SNOTEL sites, along with precipitation, antecedent streamflow are used in computerized statistical and simulation models to produce runoff forecasts. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertainty is in the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

Starting in 2020, streamflow forecasts with poor prediction skill (jackknife $r^2 < 0.34$) will no longer be issued. This will primarily affect January and June forecasts, with little change anticipated for February, March, April, and May forecasts. For more information, please contact Erin Whorton (erin.whorton@usda.gov)

April 1, 2025: Idaho Water Supply Summary

Overview

As of April 1, the snowpack appears to have peaked in all basins across Idaho. Cool temperatures at the end of March halted the snowpack melt that began around March 24 in all basins, but the upcoming warm and dry weather is almost guaranteed to continue widespread melt. April could still bring some cooler weather that slows down the snowpack melt rate, but right now, it looks like winter has ended and spring has officially arrived in Idaho. Thanks to the robust snowpack, water supply looks good across most of Idaho. The only areas of concern for water supply are in the Coeur d'Alene-St. Joe, Big Lost, Little Lost and Birch-Medicine Lodge-Beaver-Camas basins where the snowpack is below normal.

Weather, climate and drought outlooks

April started off with spring weather. One minute it was hot and sunny, the next it was snowing and cold. However, at report time, NOAA's Climate Prediction Center (CPC) forecast indicates that warmer than normal conditions are expected through mid-April. The Panhandle may see near normal precipitation, but the rest of the state is forecasted to be drier than normal. The one-month outlook forecasts equal chances for below, near, or above normal conditions for April so we will have to wait and see what spring brings to our state. Looking farther ahead this spring and summer, the CPC seasonal predictions indicate warmer and drier than normal conditions are anticipated. After our third La Niña winter in a row, ENSO-neutral (El Niño-Southern Oscillation) conditions are expected to develop in the next month and persist through the summer.

Currently, 40% of Idaho lands are abnormally dry or are in drought. Drought conditions persist along the Idaho-Montana border. The seasonal drought outlook forecasts drought conditions will persist in these areas over the next three months.

Snowpack

Like February, March was very wet in Idaho. Snowpack levels increased across the state except in the Wood and Lost basins where the snowpack levels compared to normal decreased slightly from their mid-month peak. The snowpack in Idaho on April 1 ranges from 76% of normal in the Birch-Medicine Lodge-Beaver-Camas Basin to 145% of normal in the Weiser Basin (Fig. 3). In general, conditions are wettest in western Idaho with snowpack conditions decreasing as you move east until you reach the Upper Snake basins. These basins have a near or above normal snowpack this year for the third year in a row.

In the Southern Snake River basins, the snowpack ranges from 132% of normal in the western-most Owyhee Basin to 104% of normal in eastern Raft Basin. The Bear River Basin snowpack is at 106% of normal. In the Upper Snake basins, the Willow-Blackfoot-Portneuf Basin and Snake River above Heise are both above normal at 121% and 110% respectively. Conditions have been drier all winter in the Henrys Fork-Teton Basin but their snowpack is still at normal levels (99%). In the Wood and Lost basins, conditions are driest in the east (76%) and wetter in the west. The Big Wood Basin snowpack is at 111% of normal. The Boise Basin snowpack is at 126% of normal with wetter conditions towards the western portion of the West Central basins (145% of normal). The snowpack in the Salmon Basin is above normal at 114%. Conditions are a little drier as you move north into the Clearwater Basin (96%) and Kootenai-Pend Oreille Basin (99%) but are still near normal. In the Panhandle, conditions are driest in the Coeur d'Alene-St. Joe Basin at 89% of normal.

March was a tumultuous month for the snowpack in Idaho. Large storms built up the snowpack leading to several basins (West Central, Wood, Lost) exceeding their typical seasonal median peak snowpack by March 24. This occurred a few weeks earlier than normal. In northern Idaho, powerful storms brought abundant moisture to the region, but a lot of the precipitation fell as rain during the latter storms. This led to snowpack losses with snow water equivalence (SWE) decreasing at many SNOTEL stations in the Panhandle and Clearwater during the last week of the month. The last week of March was notable in basins south of the Panhandle, too; all basins in Idaho experienced SWE losses starting around March 24. These SWE losses were not due to rain-on-snow events like those in the Panhandle but were due to unseasonably warm temperatures which jumpstarted the melt season. Air temperature reached a record 81 degrees at the Boise Airport on March 26. Throughout Idaho, temperatures were warmer than normal by one to three degrees in March. This notably differed from the colder than normal conditions during January and February which mostly preserved the low elevation snowpack those months with the exception of two melt events in February.

Although water users can see the latest snowpack conditions by visiting the NRCS interactive map, the percent compared to normal map starts telling a different story in the melt season so users should proceed with caution. During the melt season, the snowpack numbers as a percent of normal reflects how the timing of this year's melt compares to the 30-year median. Often percentages can become very high, which indicates that this year's snowpack is melting at a slower rate than is typical. If the percent compared to normal numbers become very low, this indicates the snowpack is melting faster than the average rate. We recommend looking at figure 5, our peak snowpack map or at the peak snowpack interactive map online as the melt season progresses.

Precipitation

March was a wet month across Idaho. Monthly precipitation was near to above normal in all basins (Fig. 1). March precipitation ranged from 97% of normal in the Big Wood Basin to 142% of normal in the Willow-Blackfoot-Portneuf Basin. March wasn't quite as wet as

February, but it was about two to three times as wet as January. Well above normal precipitation in northern Idaho was very welcome since this area has been drier than the rest of the state throughout the winter. However, the well above normal precipitation in the Coeur d'Alene-St. Joe Basin during March (119%) was not enough to overcome the total water year precipitation (WYP) deficit. That basin is the headwaters of the Spokane River, and it remains one of the driest in the state with total WYP at only 83% of normal (Fig. 2). A wet spring is needed to bring this basin in line with the region where precipitation levels are closer to normal (~93%) in the surrounding basins. Fortunately, there was enough improvement in this region that fewer sites are recording WYP percentiles that fall under the moderate drought category (D1) compared to last month. Overall, the Panhandle and Clearwater basins experienced a big improvement in WYP levels from the beginning of March thanks to two back-to-back months with well above normal precipitation.

Total water year precipitation (Fig. 2) in Idaho ranges from ~83% up north to 120% in the Weiser Basin. Western and southern Idaho have been the wettest areas of the state. Across central Idaho, conditions are drier to the east and wetter in the west. Total WYP is at 86% of normal in the Birch-Medicine Lodge-Beaver-Camas Basin to 99% of normal in the Big Wood Basin, to 109% of normal in the Boise Basin, and then to 120% in the Weiser Basin. WYP in the Salmon Basin closely align with surrounding basins at 108% of normal. Moving south, conditions are slightly drier in the east compared to the western basins in the Southern Snake group. Total WYP ranges from 103% of normal in the Raft Basin to 117% of normal in the Owyhee Basin. In the Upper Snake, conditions have remained drier in the Henrys Fork-Teton Basin (100%) compared to the Snake River Above Heise (105%) and the Willow-Blackfoot-Portneuf at 111% of normal. The Bear River Basin total WYP is 106% of normal as of April 1 (Fig. 2).

Water supply

The near to above normal snowpack across many basins in Idaho bodes well for a good water supply season this water year. Of course, what happens during the spring and summer will strongly influence whether there is enough water to go around, but with this year's snowpack and the expectation reservoirs will fill, conditions are setting water users up for success. The areas where we have water supply concerns at this time are the Big and Little Lost basins, as well as in the Birch-Medicine Lodge-Beaver-Camas and Coeur d'Alene-St. Joe basins. These basins all have a below normal snowpack except for the Big Lost, where the snowpack isn't quite robust enough to make up for the difference between reservoir storage and water supply demands.

Streamflow levels rose in March as warm temperatures and rain-on-snow events melted the low elevation snowpack. During the last seven days, streamflow in northern Idaho rivers increased significantly but has dropped off in the past few days in response to cooler weather. Over the next few weeks, with the forecasted warmer than normal temperatures, streamflow will rise in rivers across Idaho as the mid- to higher elevation snowpack begins to melt. It will be good for water supply if the snowpack melts slowly

and gradually to allow for reservoirs to be able to capture that snowmelt and to prolong natural flow later in the season for irrigation water users.

Reservoir storage is near to above normal in Idaho. From the Clearwater to the Canadian border, storage is 87% to 173% of normal. Dworshak operations are anticipated to pass reservoir inflow for the remainder of the month to reach the end of April flood risk management (FRM) target elevation. The Boise River system has near normal storage at 95% of normal (64% of capacity) and is currently being drafted to make room for peak runoff. The system is expected to fill and an estimated excess 400 KAF (thousand acre-feet) to 700 KAF of water needs to be passed through the system this spring. Flood risk management operations began in mid-March on the Boise River and are expected to continue through mid-June. The Payette River system is 63% full (storage is 93% of normal). This system is also being drafted to make room for incoming snowmelt. Reservoir storage ranges from 90 to 96% of normal in the Wood and Lost basins. Storage in the Southern Snake basins varies considerably. Lake Owyhee is 150% of normal, Oakley Reservoir is 137% of normal, while its neighbor, Salmon Falls Reservoir, is at 85% of normal storage. Flood risk management continues in eastern Oregon with the above normal reservoir storage and well above normal snowpack. Bear Lake is at 186% of normal and users can expect a full storage allocation this irrigation season.

Total storage in the Upper Snake River system above Milner Dam is 116% of normal (85% capacity). Reservoir storage has continued to accrue much faster than the average rate. There isn't any spill past Milner Dam. According to the Army Corps of Engineers (USACE), "...flows through the Jackson levee system are currently not expected to near the lowest USACE Water Management trigger flow of 10,000 cubic feet per second (cfs) for at least the first half of April. To near USACE Water Management trigger flows, significant precipitation on top of consecutive days of warm weather, combined with increased flood risk management (FRM) releases from Jackson Dam would be needed. These triggering conditions are not in the short-term forecast. It is possible that increased FRM releases from Jackson Dam may be needed at the end of April or in early May to safely control the rate of refill, but at this time, they are not expected to push flows at the levees into trigger levels." The NRCS forecast for the primary April through July snowmelt runoff period at Heise predicts above normal runoff at 112% of normal. The forecast increased last month thanks to another month with above average precipitation (123% of normal precipitation). The forecast at Heise is 3,980 thousand acre-feet (KAF) for April through September, an increase of 350 KAF from last month.

Please note that streamflow forecasts are based on April 1 snowpack and total water year precipitation conditions (Fig. 4). In northern Idaho, streamflow forecasts improved marginally from last month but are still below normal. Streamflow forecasts for the primary period are lowest in the Coeur d'Alene-St. Joe Basin (76 to 88%) and slightly higher in the Pend Oreille-Kootenai Basin (~90%). Moving south to the Clearwater Basin, streamflow ranges from 87% of normal for the Dworshak Inflow to 109% on the Selway

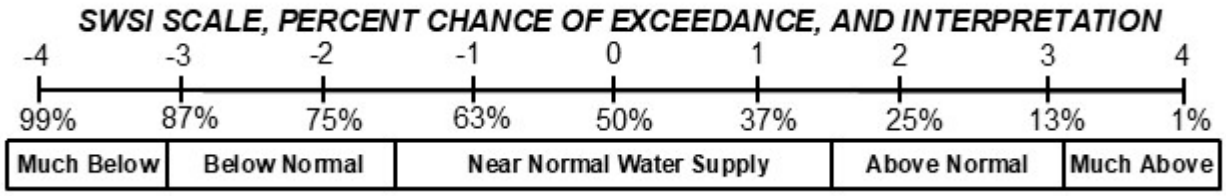
River. In the Salmon Basin, streamflow forecasts increased from last month. Streamflow conditions are a little drier on the eastern side (95 to 101%) compared to the western portion of the basin (~113 to 126%) and reflect the difference in snowpack across the basin. The wetter in the west than the east trend continues as you move from the western Weiser Basin into the Wood and Lost basins. Streamflow forecasts in the Weiser and Payette basins range from 115 to 166% of normal, a small increase from last month. Conditions in the Boise and Big Wood basins are above normal (106 to 173%). The forecast for the Big Wood at Hailey for April through September is 245 KAF, an increase in 15 KAF from last month's forecast. Forecasts further east in the Wood and Lost basins range from 53% of normal at Camas Creek at Camas to 90% of normal on the Little Wood River above High Five Creek. Forecasts in general decreased in these basins compared to last month due to below median precipitation in March. Water supply limitations may occur in the Little and Big Lost basins. Streamflow forecasts in the Henrys Fork-Teton increased slightly from last month. Forecasts range from 87% on the Henrys Fork near Ashton to 106% of normal on the Teton River near St. Anthony. Forecasts in the Snake River headwaters range from 91% at the inflow to Jackson Lake to 113% down south on the Salt River. Forecasts in this basin remained nearly the same compared to last month. As expected from the higher snowpack levels, streamflow is also highest in the Willow-Blackfoot-Portneuf Basin (136 to 160%). Streamflow forecasts increased quite a bit from last month is this basin due to receiving 142% of it's normal precipitation in March. It should be another great whitewater rafting season in the Southern Snake River basins. Along the southern border of Idaho, streamflow forecasts increased from last month due to above median March precipitation. They range from 115% in the Oakley Basin to 185% at the Owyhee near Rome forecast point. Streamflow, snowpack, and precipitation data for each basin can be accessed in basin reports or on the NRCS interactive map.

Idaho Surface Water Supply Index (SWSI) - April 01, 2025

The Surface Water Supply Index (SWSI) is a predictive indicator of surface water availability within a watershed for the spring and summer water use season. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow. SWSI values are scaled from +4.0 (abundant supply) to -4.0 (extremely dry), with a value of zero indicating a median water supply as compared to historical occurrences. The SWSI analysis period is from 1991 to present.

SWSI values provide a more comprehensive outlook of water availability by combining streamflow forecasts and reservoir storage where appropriate. The SWSI index allows comparison of water availability between basins for drought or flood severity analysis. Threshold SWSI values have been determined for some basins to indicate the potential for agricultural irrigation water shortages.

Basin or Region	Reservoir Storage (KAF)	50% Exceedance Forecast (KAF)	Storage + Forecast (KAF)	Percentile	SWSI Value	Water Supply Threshold SWSI Value	Similar SWSI Value Years
Northern Panhandle Region	----	450	450	43	-0.6	----	2010, 1994
Spokane River Basin	267	1,970	2,237	38	-1.0	----	1998, 2010
Clearwater River Basin	2,668	6,800	9,468	44	-0.5	----	2000, 2004
Salmon River Basin	----	6,440	6,440	52	0.2	----	2023, 2020
Weiser River Basin	----	585	585	82	2.7	----	1996, 1993
Payette River Basin	542	1,980	2,522	70	1.7	----	1993, 2012
Boise River Basin	650	1,580	2,230	68	1.5	-2.4	2018, 2019
Big Wood above Hailey	----	245	245	58	0.7	-2.6	2005, 2018
Big Wood River Basin	73	240	313	60	0.8	0.3	2000, 2024
Camas Creek Near Blaine	----	91	91	68	1.5	----	2012, 2023
Little Wood River Basin	21	50	71	44	-0.5	-1.6	2000, 2003
Big Lost River Basin	30	106	136	48	-0.2	1.0	2008, 2024
Little Lost River Basin	----	27	27	43	-0.6	2.0	2000, 2016
Teton River Basin	----	190	190	52	0.2	-3.8	2020, 2019
Henrys Fork Basin	220	1,445	1,665	56	0.5	-2.9	2020, 2014
Snake River Near Heise	1,740	3,980	5,720	72	1.8	-1.7	2024, 2019
Oakley Basin	37	25	62	76	2.2	-0.1	2007, 1996
Salmon Falls above Jackpot	----	78	78	58	0.7	----	2024, 1999
Salmon Falls Creek Basin	38	78	116	43	-0.6	-0.7	2000, 2005
Bruneau Basin	----	220	220	64	1.2	----	2024, 1996
Owyhee Basin	692	350	1,042	72	1.8	-2.1	1995, 2019
Bear River Basin	948	166	1,114	84	2.8	-3.8	2018, 2024



"----" = Not Available / Not Applicable; Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and less than -3.0, 13% of the time. Half the time, the SWSI will be below and half the time above a value of zero. The interval between -1.5 and +1.5 described as "Near Normal Water Supply" represents three SWSI units and would be expected to occur about one-third (36%) of the time.

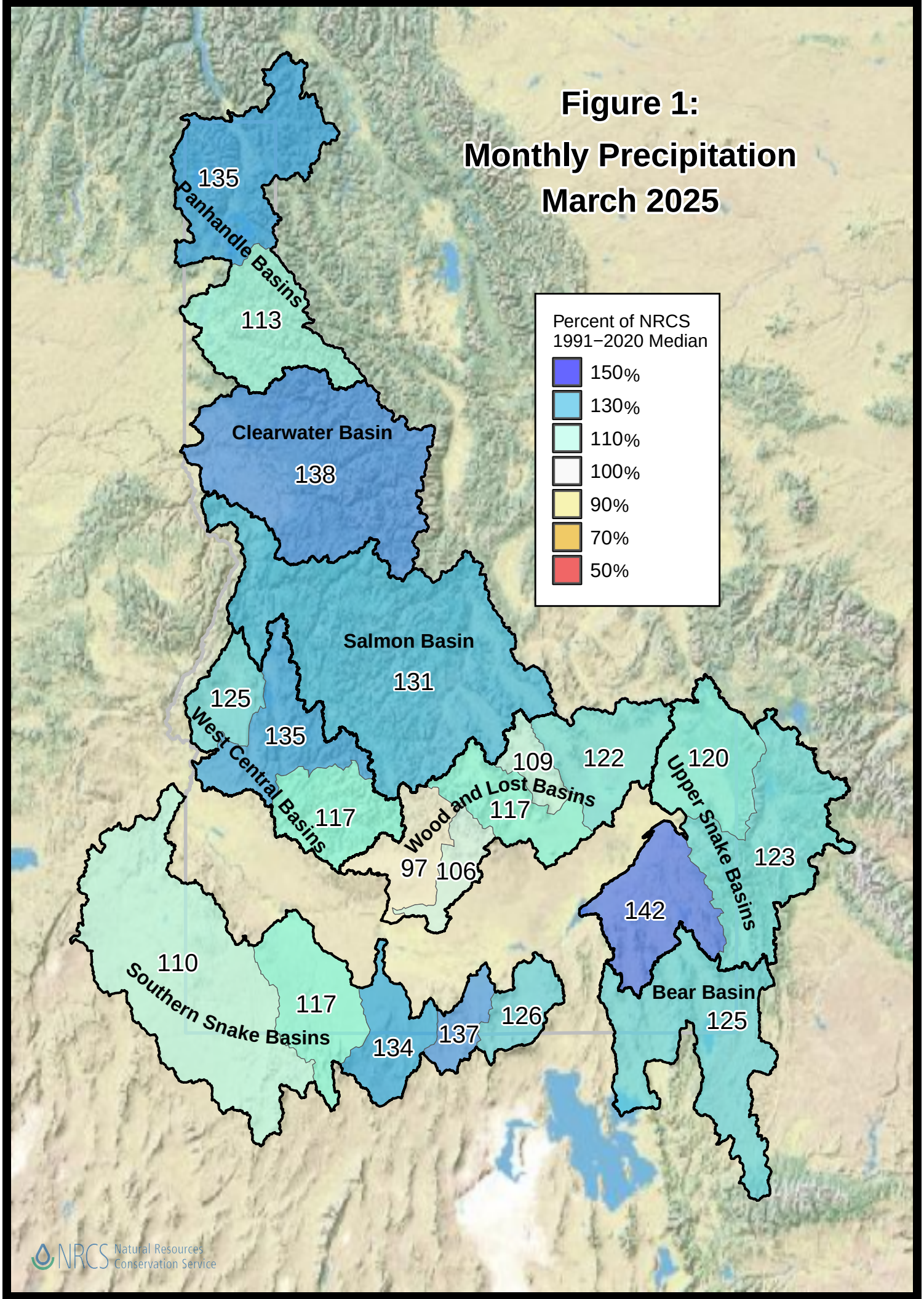


Figure 1:
Monthly Precipitation
March 2025
Percent of NRCS
1991−2020 Median
150%
130%
110%
100%
90%
70%
50%
135
Panhandle Basins
113
Clearwater Basin
138
Salmon Basin
131
125
135
West Central Basins
117
109
122
120
Upper Snake Basins
123
Wood and Lost Basins
117
97
106
142
110
Southern Snake Basins
117
134
137
126
Bear Basin
125
NRCS Natural Resources Conservation Service

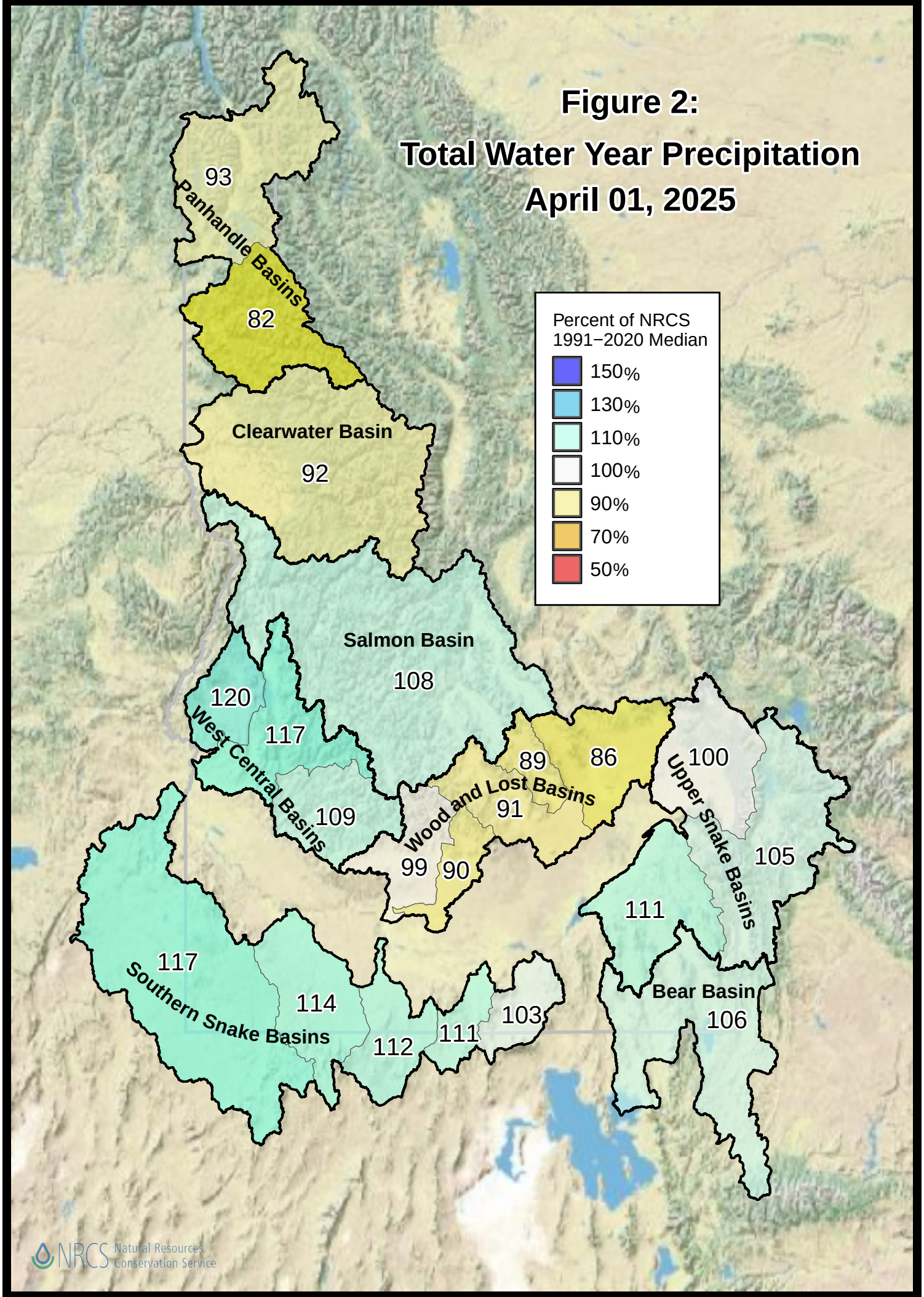


Figure 2:
Total Water Year Precipitation
April 01, 2025
Percent of NRCS
1991−2020 Median
150%
130%
110%
100%
90%
70%
50%
93
Panhandle Basins
82
Clearwater Basin
92
Salmon Basin
108
120
117
West Central Basins
109
89
86
Wood and Lost Basins
91
99
90
100
Upper Snake Basins
105
111
117
Southern Snake Basins
114
112
111
103
Bear Basin
106
NRCS Natural Resources Conservation Service

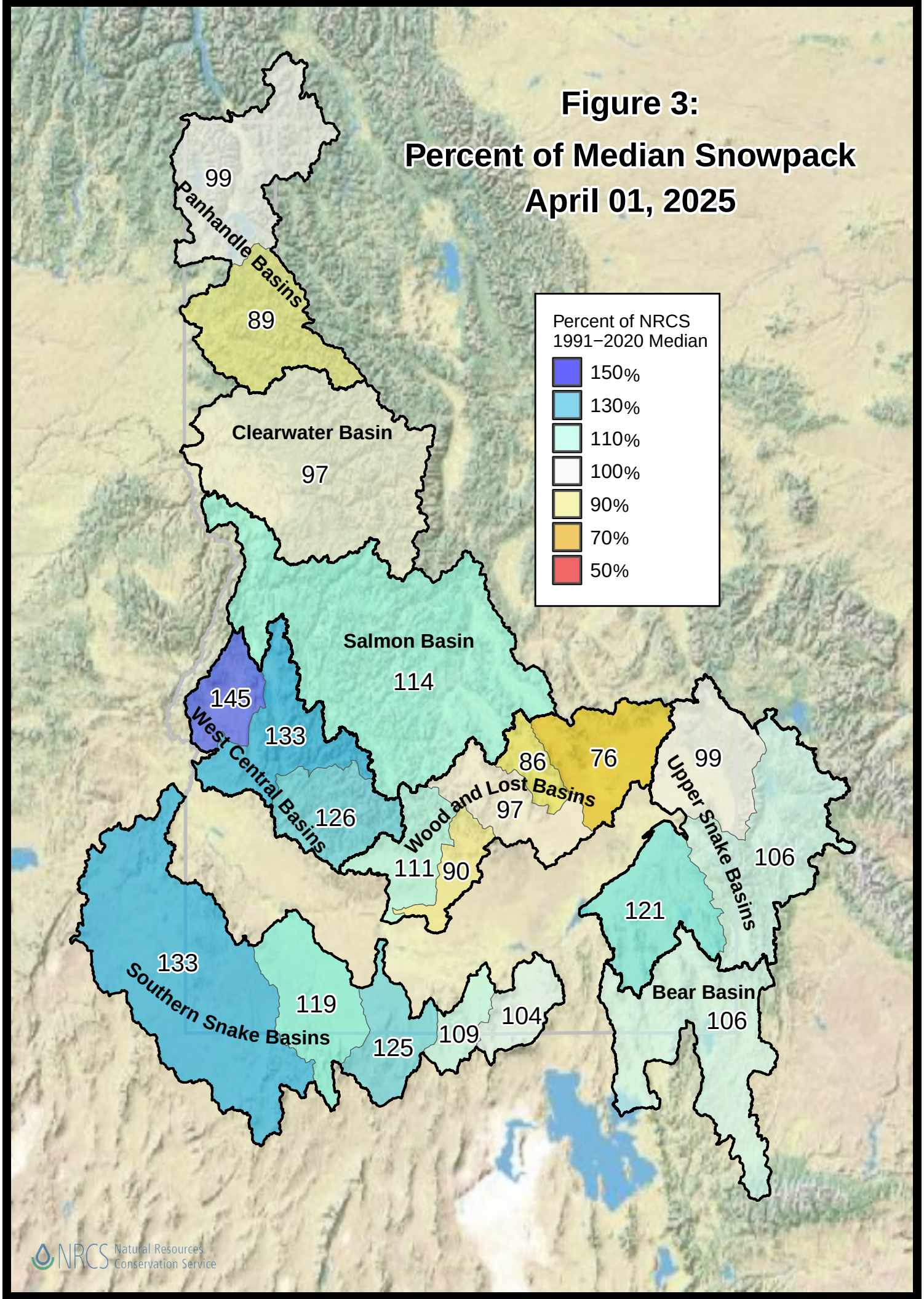


Figure 3:
Percent of Median Snowpack
April 01, 2025
Percent of NRCS
1991−2020 Median
150%
130%
110%
100%
90%
70%
50%
99
Panhandle Basins
89
Clearwater Basin
97
Salmon Basin
114
145
133
West Central Basins
126
86
76
Wood and Lost Basins
97
99
Upper Snake Basins
106
111
90
121
133
Southern Snake Basins
119
125
109
104
Bear Basin
106
NRCS Natural Resources Conservation Service

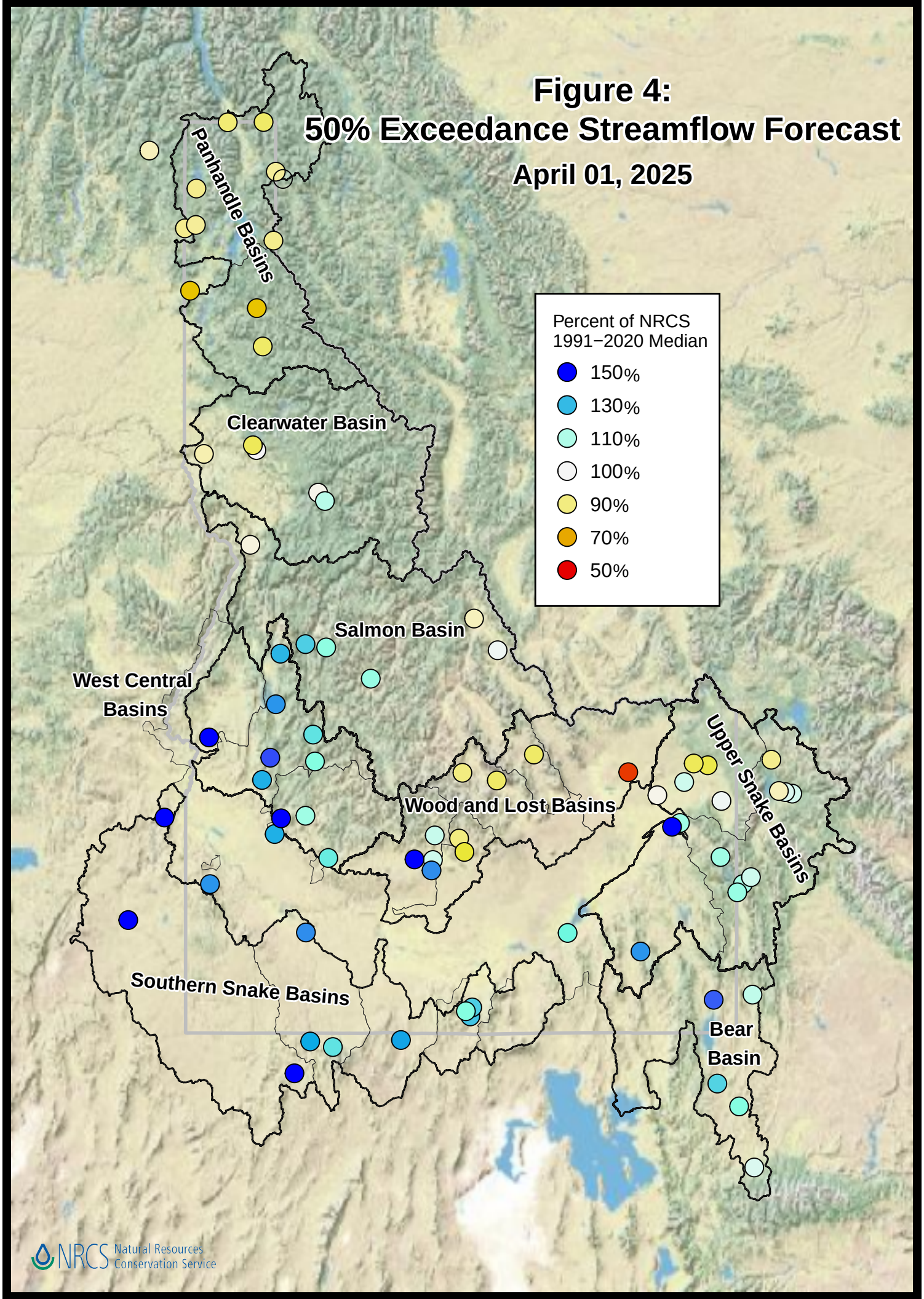


Figure 4:
50% Exceedance Streamflow Forecast
April 01, 2025
Panhandle Basins
Clearwater Basin
Salmon Basin
West Central Basins
Wood and Lost Basins
Upper Snake Basins
Southern Snake Basins
Bear Basin
Percent of NRCS 1991−2020 Median
150%
130%
110%
100%
90%
70%
50%
NRCS Natural Resources Conservation Service

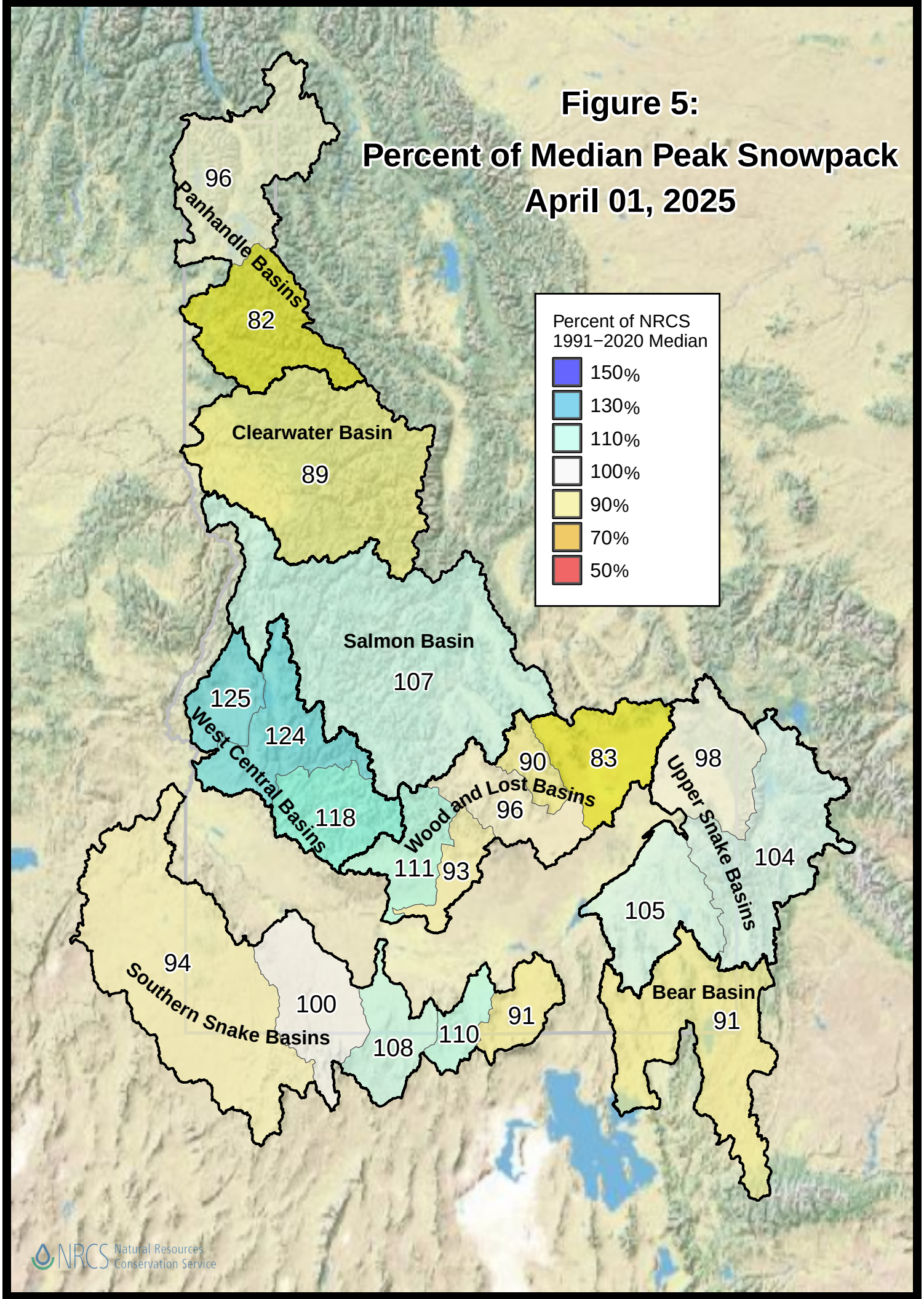
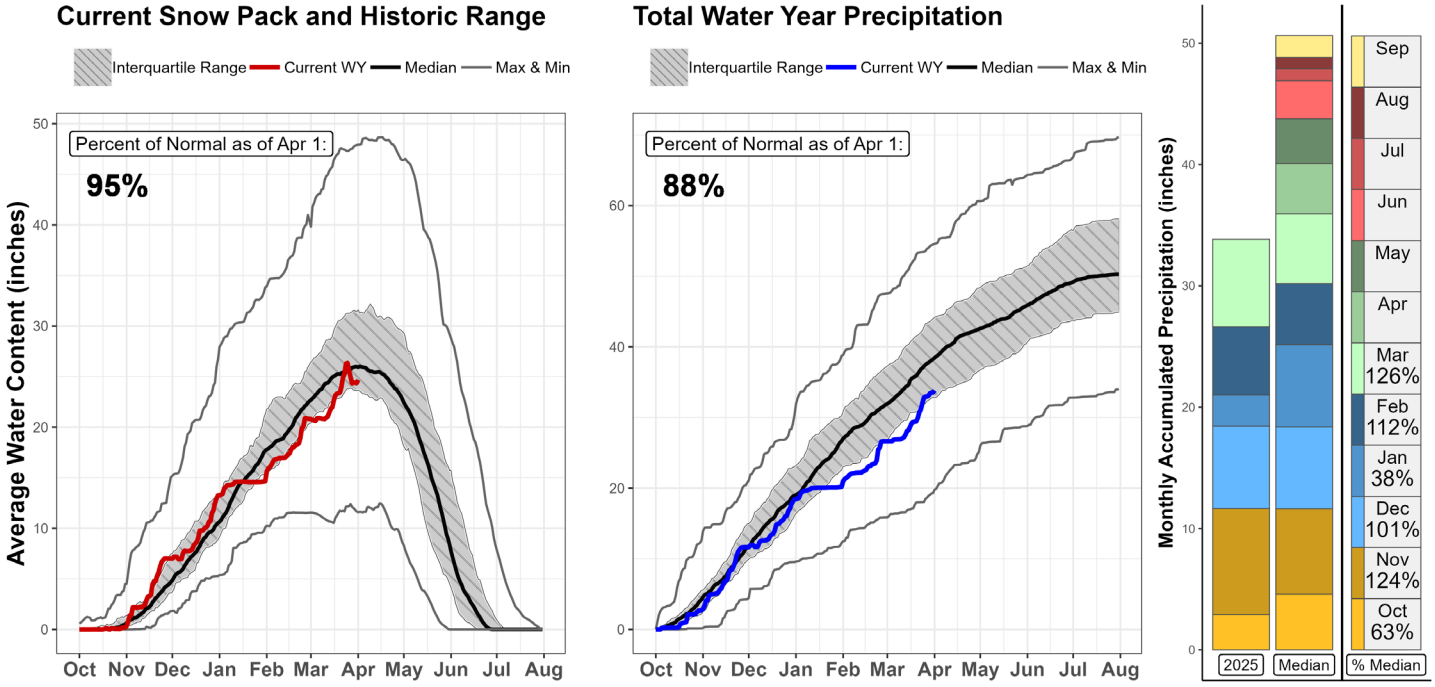


Figure 5:
Percent of Median Peak Snowpack
April 01, 2025
Percent of NRCS
1991−2020 Median
150%
130%
110%
100%
90%
70%
50%
96
Panhandle Basins
82
Clearwater Basin
89
Salmon Basin
107
125
124
West Central Basins
118
90
83
Wood and Lost Basins
96
98
Upper Snake Basins
104
111
93
105
94
Southern Snake Basins
100
108
110
91
Bear Basin
91
NRCS Natural Resources Conservation Service

Panhandle Basins

April 1, 2025



WATER SUPPLY OUTLOOK

Snowpack in the Panhandle basins had a slow start in March; the Coeur d'Alene-St. Joe and Pend Oreille-Kootenai basins were below normal on March 15. However, conditions changed rapidly in the last half of March. A persistent cool and wet weather pattern brought significant amounts of snow to the Panhandle basins at nearly all elevations between March 15 and March 25. This brought the basins to near to above normal snowpack conditions. Again, conditions changed dramatically after March 25. A warm and wet pattern began as southwesterly storms moved into the region, and these atmospheric rivers brought mostly rain. The above normal temperatures and rain-on-snow events affected an already ripe snowpack. Nearly all stations lost more than an inch of snow water equivalent (SWE) with several stations losing ~4 inches of SWE in the last week of March as most areas at elevations below ~3,500 feet melted out. A cooler pattern set in as of March 31; higher elevations are receiving small amounts of snow with cooler temperatures tempering the snowmelt. Monthly precipitation for March was ~120 to 135% of normal (Fig. 1). Total water year precipitation as of April 1 is ~80 to 90% of normal (Fig. 2). April 1 snowpack is ~90 to 100% of normal (Fig. 3).

Reservoir storage across the basin is: Coeur d'Alene 173%, Pend Oreille 87%, Priest Lake 129%. Streamflow forecasts are ~75 to 95% of normal for 50% exceedance streamflow (Fig. 4). The Climate Prediction Center's 30-day outlook is showing equal chances of above or below normal precipitation and temperatures for April.

Panhandle Basins Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Kootenai R at Leonia 1 & 2	APR-JUL	4,800	5,710	6,130	92	6,550	7,460	6,680
	APR-SEP	5,570	6,530	6,970	92	7,410	8,370	7,560
Moyie R at Eastport	APR-JUL	245	300	330	88	365	410	375
	APR-SEP	250	305	340	87	375	425	390
Boundary Ck nr Porthill	APR-JUL	84	97	106	89	114	129	119
	APR-SEP	89	101	110	89	119	132	124
Clark Fork R bl Cabinet Gorge Dam 2	APR-JUL	7,370	8,460	9,100	91	9,940	10,900	9,980
	APR-SEP	7,870	8,990	9,850	90	10,800	11,800	10,900
Priest R Outflow NR Coolin	APR-JUL	535	590	625	91	660	720	690
	APR-SEP	530	600	650	90	680	760	725
Priest R nr Priest River 2	APR-JUL	625	715	775	92	840	955	840
	APR-SEP	640	735	800	91	870	985	880
Pend Oreille R at Newport WA 2	APR-JUL	8,490	9,570	10,600	91	11,400	12,500	11,700
	APR-SEP	9,510	10,800	11,700	93	12,700	14,100	12,600
Pend Oreille R bl Box Canyon	APR-JUL	8,980	10,200	11,100	95	12,100	13,200	11,700
	APR-SEP	9,470	10,900	12,000	94	13,000	14,500	12,700
NF Coeur dAlene R at Enaville	APR-JUL	405	475	540	76	605	715	715
	APR-SEP	420	495	560	75	630	735	750
St. Joe R at Calder 2	APR-JUL	750	850	920	88	985	1,100	1,050
	APR-SEP	780	885	965	86	1,040	1,150	1,120
Spokane R nr Post Falls 2	APR-JUL	1,350	1,660	1,900	76	2,110	2,480	2,510
	APR-SEP	1,400	1,720	1,970	77	2,190	2,560	2,570

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025

Reservoir Name	Current (KAF)	2024	Median (KAF)	Capacity (KAF)
Hungry Horse Lake	2,447.3	2,863.1	2,357.0	3,451.0
Flathead Lake	985.8	797.0	739.1	1,791.0
Lake Pend Oreille	655.7	570.9	755.3	1,561.3
Priest Lake	83.2	86.5	64.4	119.3
Lake Coeur d' Alene	266.6	149.7	153.8	238.5

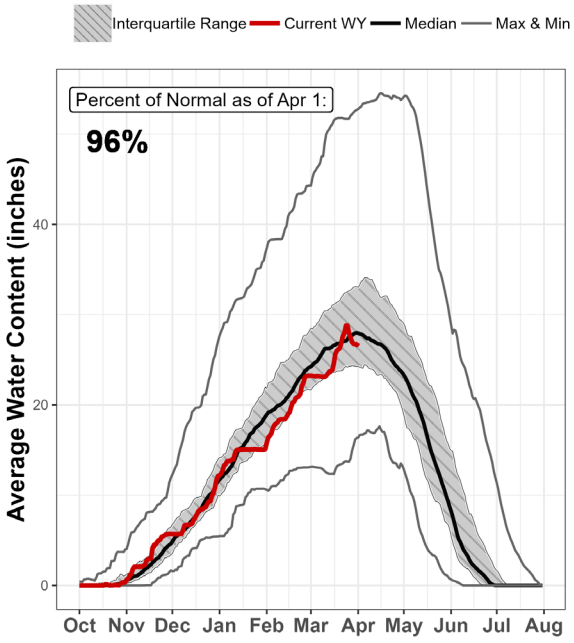
Watershed Snowpack Analysis - April 01, 2025

Basin Name	# of Sites	% of Median 2025	% of Median 2024
Pend Oreille-Kootenai	**17**	**99**	**75**
Moyie	1	82	77
Lower Kootenai	2	90	85
Priest	8	106	77
Pend Oreille Lake	6	101	73
Rathdrum	2	111	76
Coeur D'Alene-St. Joe	**12**	**89**	**73**
Coeur D'Alene	7	86	77
St. Joe	5	92	69
Palouse	2	82	62

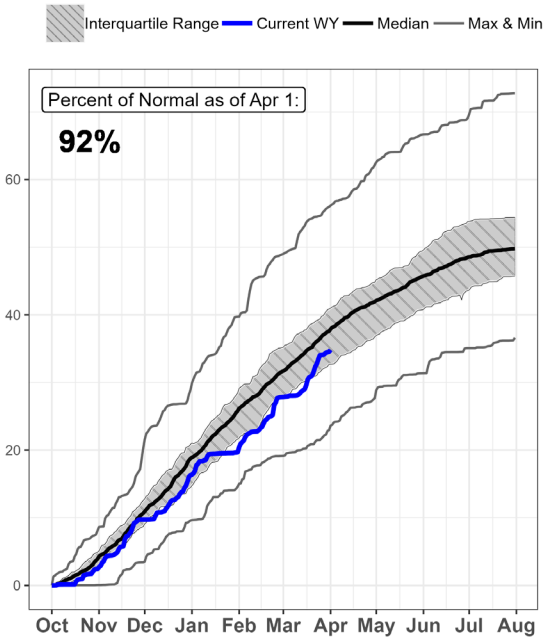
Clearwater River Basin

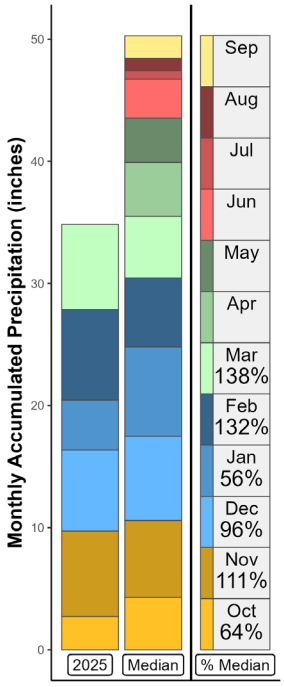
April 1, 2025

Current Snow Pack and Historic Range



Total Water Year Precipitation





WATER SUPPLY OUTLOOK

March was wet in the Clearwater Basin. However, conditions did not change until the last half of the month when frequent storms pummeled the basin. The orientation of these storm events changed the temperatures and type of precipitation received. Westerly storms were cooler and brought mostly snow to the basin between March 15 and 25. These cooler systems brought the basin from below normal snowpack conditions to near to above normal conditions by March 25. Storm orientation changed to a southwesterly flow after March 25, and these storms were warm with precipitation falling mostly as rain. Higher elevations received snowfall early on, but freezing levels increased to over 6,000 feet with these warm storms, changing from snow to rain. Snow water equivalent decreased by ~1 to 2 inches at nearly all sites in the last week of March. Sites in the central portion of the basin decreased by nearly 4.5 inches due to these rain-on-snow events and above normal temperatures. Monthly precipitation for March was 140% of normal (Fig. 1). Total water year precipitation is 92% of normal (Fig. 2). Snowpack as of April 1 is ~95% of normal.

Reservoir storage at Dworshak is 112% of normal. 50% exceedance streamflow forecasts are ~90 to 110% of normal (Fig. 4). The Climate Prediction Center's outlook is showing equal chances of above or below normal precipitation and temperatures for April.

Clearwater Basin Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Selway R nr Lowell	APR-JUL	1,850	2,000	2,130	109	2,260	2,440	1,960
	APR-SEP	1,900	2,050	2,180	106	2,320	2,510	2,050
Lochsa R nr Lowell	APR-JUL	1,220	1,320	1,410	99	1,500	1,610	1,430
	APR-SEP	1,280	1,390	1,480	99	1,570	1,700	1,500
Clearwater R at Orofino	APR-JUL	3,640	4,030	4,380	100	4,710	5,200	4,380
	APR-SEP	3,870	4,270	4,610	101	4,930	5,440	4,570
Dworshak Reservoir Inflow 2	APR-JUL	1,590	1,870	2,070	87	2,230	2,510	2,370
	APR-SEP	1,830	2,050	2,250	88	2,440	2,730	2,560
Clearwater R at Spalding 2	APR-JUL	5,300	5,960	6,390	94	6,920	7,650	6,820
	APR-SEP	5,630	6,330	6,800	93	7,350	8,140	7,290

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

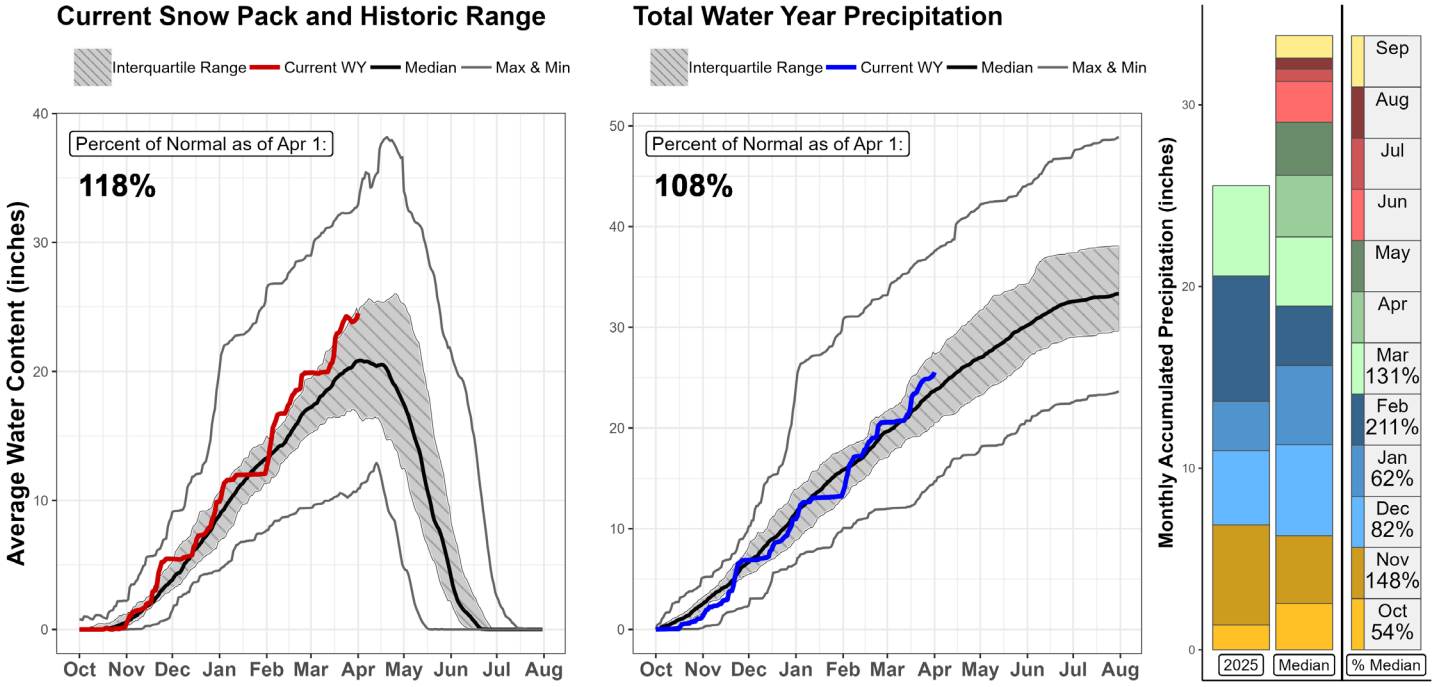
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025				
Reservoir Name	**Current (KAF)**	**2024**	**Median (KAF)**	**Capacity (KAF)**
Dworshak Reservoir	2,667.7	2,589	2,380	3,468

Watershed Snowpack Analysis - April 01, 2025			
		% of Median	
Basin Name	**# of Sites**	**2025**	**2024**
Clearwater	**17**	**97**	**71**
North Fork Clearwater	6	97	68
Lochsa	3	84	70
Selway	4	109	83
South Fork Clearwater	1	110	96

Salmon River Basin

April 1, 2025



WATER SUPPLY OUTLOOK

While starting off slow with little to no precipitation events in the first half of the month, potent storms persisted over the last half of March in the Salmon Basin. Southwesterly storms pummeled the western flank of the basin with many SNOTEL sites receiving more than 140 to 150% of monthly precipitation. Across the basin, monthly precipitation for March was productive as most SNOTEL sites received more than ~120% of precipitation with basin wide monthly precipitation at ~130% of normal (Fig. 1). The west to east disparity traditionally seen in the basin is stronger in the total water year precipitation and snowpack signals. The eastern part of the basin is near to just above normal for both snowpack and total water year precipitation, and the western edge is well above normal for both cases. Total water year precipitation is 108% of normal for April 1 (Fig. 2), and snowpack is ~115% of normal for April 1 (Fig. 3). Mid-April is generally when the basin will hit peak snowpack for the water year, and it is already at ~110% of median peak SWE as of April 1. If conditions persist with near to above normal snowpack, river rafters can expect a decent rafting season.

There are no reservoirs in the Salmon Basin. The 50% exceedance streamflow forecasts are ~95 to 130% of normal for April through July (Fig. 4). NOAA's Climate Prediction Center's 30-day outlook is showing equal chances of above or below normal precipitation and temperature for April.

Salmon Basin Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Salmon R at Salmon	APR-JUL	605	690	760	95	830	940	800
	APR-SEP	690	780	865	94	950	1,090	920
Lemhi R nr Lemhi	APR-JUL	40	57	69	101	82	98	68
	APR-SEP	53	69	81	99	95	114	82
MF Salmon R at MF Lodge	APR-JUL	715	800	875	113	950	1,060	775
	APR-SEP	780	875	950	112	1,030	1,150	850
SF Salmon R nr Krassel Ranger Station	APR-JUL	310	340	365	126	390	425	290
	APR-SEP	325	360	385	124	410	450	310
Johnson Ck at Yellow Pine	APR-JUL	198	220	240	114	265	295	210
	APR-SEP	210	240	260	118	285	320	220
Salmon R at White Bird	APR-JUL	4,970	5,470	5,810	98	6,190	6,710	5,940
	APR-SEP	5,540	6,070	6,440	98	6,840	7,430	6,600

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

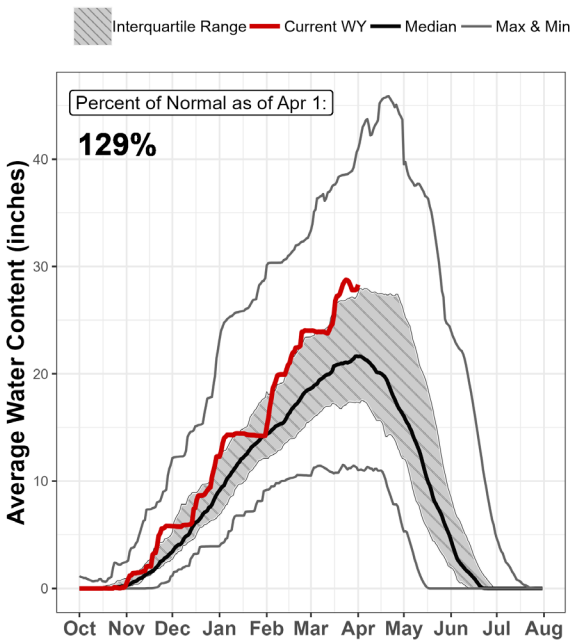
Reservoir Storage (KAF): April 01, 2025				
Reservoir Name	**Current (KAF)**	**2024**	**Median (KAF)**	**Capacity (KAF)**

Watershed Snowpack Analysis - April 01, 2025			
Basin Name	**# of Sites**	**% of Median 2025**	**2024**
Salmon	**27**	**114**	**85**
Lemhi	6	98	90
Salmon ab Salmon	10	107	90
Middle Fork Salmon	3	122	83
South Fork Salmon	3	130	82
Little Salmon	4	134	84
Lower-Middle Salmon	5	117	88

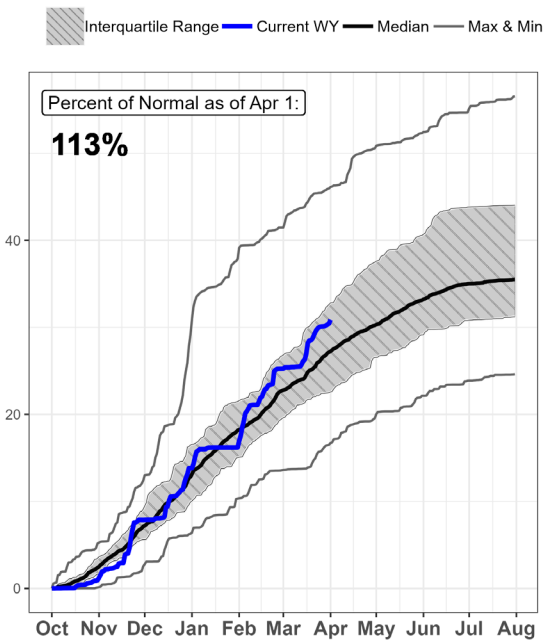
West Central Basins

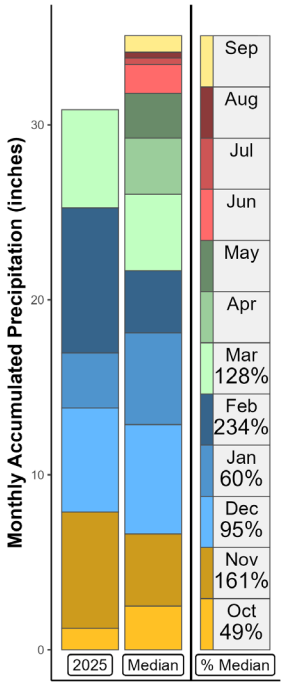
April 1, 2025

Current Snow Pack and Historic Range



Total Water Year Precipitation





WATER SUPPLY OUTLOOK

The first part of March was dry before storms brought more snow to the West Central basins between March 15 and 25. The monthly precipitation in March ranged from 117% to 135% of normal (Fig. 1). This brought total water year precipitation levels up to 109% to 120% of normal (Fig. 2). By mid-month, the snowpack in all three basins exceeded their typical median peak snowpack 4 to 18 days earlier than normal (Fig. 5). The snowpack as of April 1 ranged from 145% in the Weiser Basin to 126% of normal in the Boise Basin (Fig. 3). After approximately March 25, warm temperatures started melting the snowpack at sites below 6,000 feet. Two sites below that range (Van Wyck, Prairie) have already or have nearly melted out. Elsewhere, snowpack density has increased enough to indicate that the snowpack is ripe, meaning, it is ready to begin melting in earnest. Cool weather during the last few days of the month have slowed that process down temporarily but the 6- to 10-day outlook indicates warm and dry conditions will start April off. It is likely significant melt will begin in early April. Streamflow levels have already begun to reflect this change in snowpack conditions.

Reservoir storage in the Boise system (Anderson Ranch, Arrowrock and Lucky Peak combined) is 95% of normal on April 1 (64% full). Storage in the Payette system is 93% of normal (63% full). Both systems began drafting in mid-March to make room for the incoming snowmelt. The 50% exceedance streamflow forecasts for the April through July period in the Boise River Basin is 112% to 164% of normal, the Payette is 115% to 145% of normal, and the Weiser is 166% of normal (Fig. 4).

West Central Basins Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Boise R nr Twin Springs	APR-JUL	575	630	670	112	720	785	600
	APR-SEP	635	700	745	116	800	875	645
SF Boise R at Anderson Ranch Dam 2	APR-JUL	405	460	505	120	540	590	420
	APR-SEP	445	495	535	119	575	625	450
Mores Ck nr Arrowrock Dam	APR-JUL	120	141	157	164	177	205	96
	APR-SEP	122	144	161	161	182	210	100
Boise R nr Boise 2	APR-JUL	1,230	1,380	1,490	132	1,600	1,770	1,130
	APR-SEP	1,320	1,470	1,580	130	1,690	1,860	1,220
SF Payette R at Lowman	APR-JUL	400	440	470	115	495	545	410
	APR-SEP	440	485	515	113	545	595	455
Deadwood Reservoir Inflow 2	APR-JUL	127	141	151	122	163	179	124
	APR-SEP	135	150	162	119	174	192	136
Lake Fork Payette R nr McCall	APR-JUL	93	101	106	131	111	117	81
	APR-SEP	95	102	108	130	114	120	83
NF Payette R at Cascade 2	APR-JUL	565	615	655	136	690	745	480
	APR-SEP	570	625	665	136	700	755	490
NF Payette R nr Banks 2	APR-JUL	730	800	860	145	915	985	595
	APR-SEP	730	800	860	141	915	995	610
Payette R nr Horseshoe Bend 2	APR-JUL	1,580	1,760	1,890	132	2,020	2,210	1,430
	APR-SEP	1,690	1,860	1,980	129	2,110	2,310	1,530
Weiser R nr Weiser	APR-JUL	460	525	565	166	610	665	340
	APR-SEP	475	540	585	158	635	700	370

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

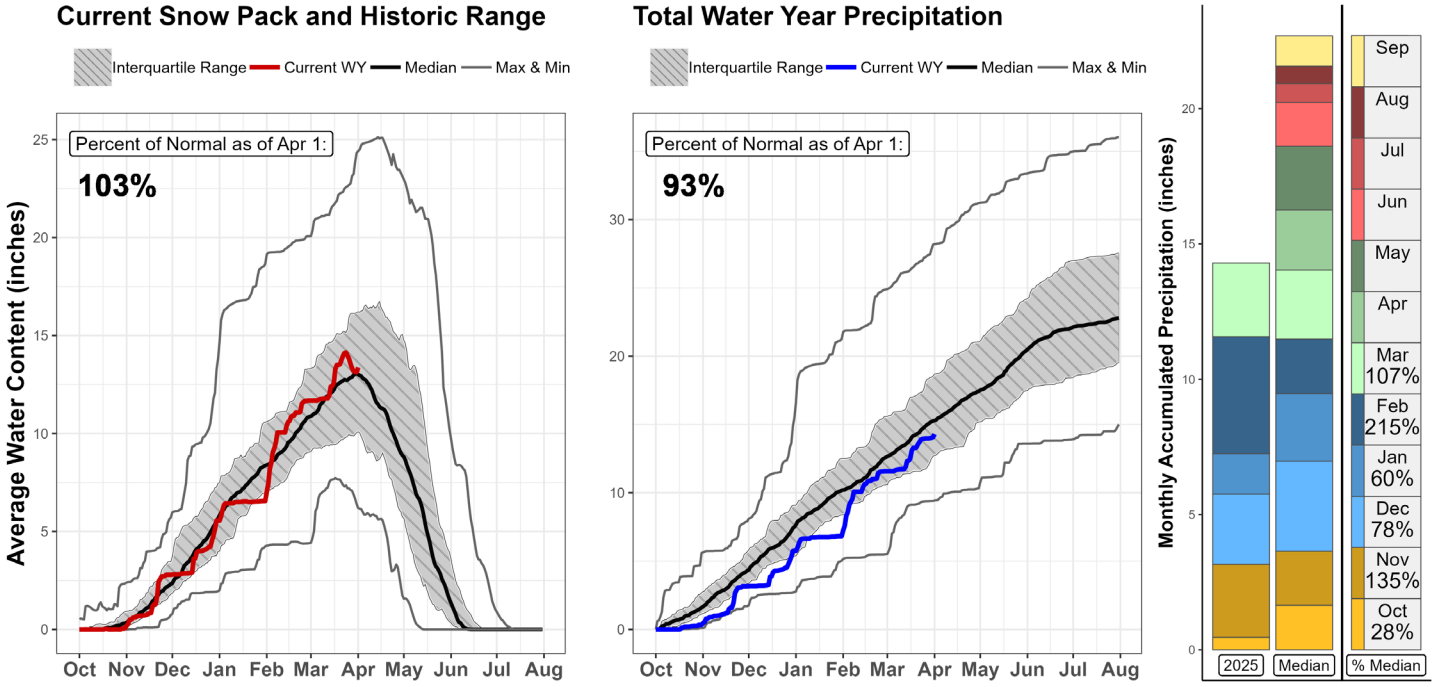
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025				
Reservoir Name	**Current (KAF)**	**2024**	**Median (KAF)**	**Capacity (KAF)**
Anderson Ranch Reservoir	329.5	407.3	282.5	450.2
Arrowrock Reservoir	123.6	210.4	221.3	272.2
Lucky Peak Reservoir	196.5	222.7	177.4	293.2
Boise River System Total	**649.6**	**840.5**	**681.2**	**1,015.6**
Deadwood Reservoir	86.7	102.0	91.3	161.9
Cascade Reservoir	455.8	527.5	493.5	693.2
Payette River System Total	**542.5**	**629.5**	**584.8**	**855.1**
Lake Lowell	130.9	112.3	118.1	165.2
Mann Creek Reservoir	8.7	9.4	8.2	11.1

Watershed Snowpack Analysis - April 01, 2025			
Basin Name	**# of Sites**	**% of Median 2025**	**2024**
Boise	**18**	**126**	**100**
Mores	6	127	101
North and Middle Fork Boise	6	121	88
South Fork Boise	9	123	100
Canyon	2	206	135
Payette	**18**	**133**	**90**
North Fork Payette	9	137	87
South Fork Payette	3	122	81
Weiser	**10**	**145**	**93**
Mann	2	167	101

Wood & Lost River Basins

April 1, 2025



WATER SUPPLY OUTLOOK

The Wood and Lost basins received near to above normal precipitation during March (Fig. 1), ranging from ~100 to 120% of normal. This improved total water year precipitation which now ranges from ~85 to 100% (Fig. 2). Snowpack continues to vary across the sub-basins, ranging from ~75 to 110% of normal (Fig. 3). Snowpack conditions are above normal in the Big Wood but are near to below normal to the east. The Big Wood, Little Wood, and Big Lost basins all met or exceeded the normal snowpack peak, but basins to the east have yet to reach their median peak snowpack (Fig. 5). To reach median peak snowpack levels by April 1, the Little Lost and Birch-Medicine Lodge-Beaver-Camas basins will need cool temperatures and above normal precipitation in the coming weeks. A greater amount of snow is needed in the Birch-Medicine Lodge-Beaver-Camas Basin where it is currently only 83% of the median peak which typically occurs on April 15. NOAA's Climate Prediction Center's 30-day outlook predicts equal chances for above or below normal temperatures and precipitation.

Magic Reservoir storage as of April 1, is 90% of normal (38% capacity). Little Wood Reservoir has near normal storage at 96% of normal (70% capacity), whereas Mackay Reservoir is still below normal at 93% (68% capacity). Streamflow forecasts for the Wood and Lost basins range from ~85 to 105% of normal for the 50% exceedance forecast (Fig. 4), except for Camas Creek at Camas at 53% of normal and Camas Creek near Blaine at 173% of normal.

Wood and Lost Basins Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Camas Ck at Camas	APR-JUL	0.2	2.3	9.2	53	13	21	17.3
Little Lost R bl Wet Ck nr Howe	APR-JUL	16.3	19.8	22.0	88	25	29	25.0
	APR-SEP	19.1	23.0	27.0	93	30	35	29.0
Big Lost R at Howell Ranch	APR-JUL	95.0	115.0	131.0	90	148	173	145.0
	APR-SEP	114.0	137.0	155.0	97	173	205	159.0
Big Lost R bl Mackay Reservoir	APR-JUL	62.0	78.0	92.0	88	106	130	104.0
	APR-SEP	76.0	93.0	106.0	83	122	147	127.0
Big Wood R at Hailey	APR-JUL	178.0	205.0	225.0	107	250	295	210.0
	APR-SEP	184.0	215.0	245.0	107	270	315	230.0
Big Wood R ab Magic Reservoir	APR-JUL	82.0	116.0	147.0	106	182	245	139.0
	APR-SEP	97.0	139.0	175.0	120	220	295	146.0
Camas Ck nr Blaine	APR-JUL	44.0	62.0	78.0	173	96	126	45.0
	APR-SEP	53.0	74.0	91.0	198	111	143	46.0
Big Wood R bl Magic Dam 2	APR-JUL	145.0	194.0	235.0	137	285	365	172.0
	APR-SEP	156.0	200.0	240.0	132	285	355	182.0
Little Wood R ab High Five Ck	APR-JUL	31.0	40.0	47.0	90	55	67	52.0
	APR-SEP	34.0	44.0	52.0	93	59	72	56.0
Little Wood R nr Carey 2	APR-JUL	30.0	39.0	46.0	85	53	66	54.0
	APR-SEP	32.0	42.0	50.0	86	58	70	58.0

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

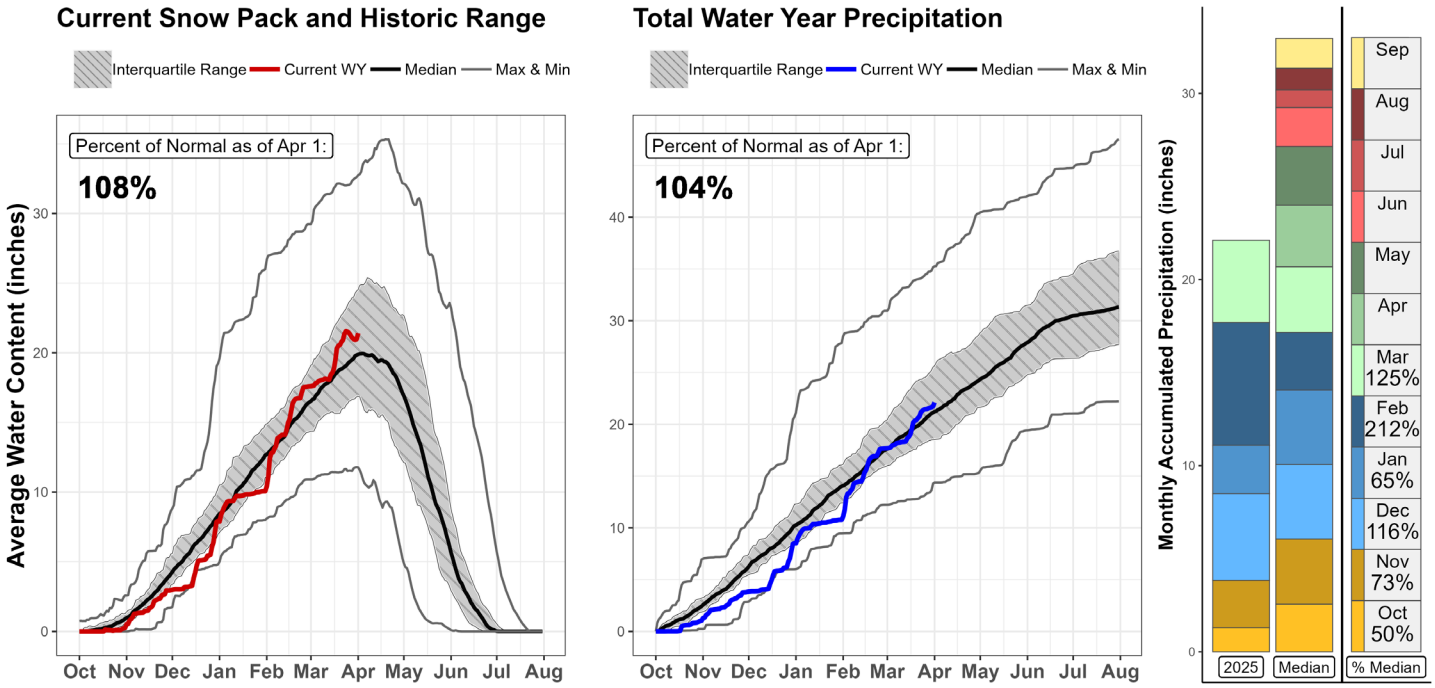
2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025				
Reservoir Name	**Current (KAF)**	**2024**	**Median (KAF)**	**Capacity (KAF)**
Mackay Reservoir	30.4	25.9	32.8	44.4
Little Wood Reservoir	21.1	23.8	22.1	30.0
Magic Reservoir	73.4	161.3	81.4	191.5

Watershed Snowpack Analysis - April 01, 2025			
		% of Median	
Basin Name	**# of Sites**	**2025**	**2024**
Big Wood	**12**	**111**	**97**
Big Wood ab Hailey	8	107	92
Camas	4	122	111
Little Wood	**8**	**90**	**100**
Little Wood ab Resv	5	92	102
Big Lost	**7**	**97**	**94**
Big Lost ab Mackay	5	102	93
Fish	3	85	94
Little Lost	**5**	**86**	**93**
Birch-Medicine Lodge-Beaver-Camas	**10**	**76**	**96**
Birch-Medicine Lodge	6	78	94
Camas-Beaver	4	73	100

Upper Snake River Basins

April 1, 2025



WATER SUPPLY OUTLOOK

The Upper Snake received well above normal precipitation in March, ranging from 120 to 142% of normal (Fig. 1). This brought total water year precipitation to 100% for Henrys Fork-Teton, 105% for Snake River above Heise, and 111% for Willow-Blackfoot-Portneuf (Fig. 2). Snowpack for the Upper Snake basins is 99% of normal for Henrys Fork-Teton, 110% for Snake River above Heise, and 121% for Willow-Blackfoot-Portneuf (Fig. 3). Willow-Blackfoot-Portneuf and Snake River above Heise have both reached median peak SWE, while Henrys Fork-Teton will need 0.6” to reach its median peak SWE. Willow-Blackfoot-Portneuf has likely begun to melt out for the season. Snake River above Heise and Henrys Fork-Teton have ~10 days left in their normal accumulation season, but with snowpack densities at many sites reaching above 35%, weather over the next couple weeks will have a large impact on whether we continue to see accumulation or melt begin in these basins. NOAA’s 8- to 14-day outlook is predicting above average temperatures and below average precipitation.

The Upper Snake Reservoir System is currently 116% of normal (85% capacity) and the Jackson-Palisades system is 122% of normal (77% capacity). Median streamflow forecasts in the region range from 87 to 160% for the April to July runoff period, with 112% forecast for Snake River near Heise (Fig. 4).

Upper Snake Basins Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Snake R at Flagg Ranch	APR-JUL	345	390	425	91	460	510	465
	APR-SEP	370	420	465	92	500	555	505
Snake R nr Moran 2	APR-JUL	580	645	690	95	735	820	730
	APR-SEP	630	695	740	91	795	875	810
Pacific Ck at Moran	APR-JUL	123	142	160	104	178	205	154
	APR-SEP	128	150	167	104	186	215	160
Buffalo Fk ab Lava Ck nr Moran	APR-JUL	255	280	300	105	320	350	285
	APR-SEP	295	320	345	111	365	400	310
Snake R ab Reservoir nr Alpine 2	APR-JUL	1,980	2,140	2,270	106	2,420	2,630	2,140
	APR-SEP	2,220	2,400	2,550	105	2,710	2,930	2,430
Greys R ab Reservoir nr Alpine	APR-JUL	295	325	350	111	380	425	315
	APR-SEP	350	385	415	114	445	490	365
Salt R ab Reservoir nr Etna	APR-JUL	265	310	345	113	385	445	305
	APR-SEP	325	370	405	107	450	515	380
Snake R nr Irwin 2	APR-JUL	2,780	3,090	3,290	112	3,520	3,890	2,930
	APR-SEP	3,200	3,540	3,780	111	4,050	4,470	3,420
Snake R nr Heise 2	APR-JUL	3,000	3,280	3,490	112	3,710	4,070	3,130
	APR-SEP	3,420	3,750	3,980	109	4,220	4,630	3,660
Henrys Fk nr Ashton 2	APR-JUL	355	390	415	87	445	490	475
	APR-SEP	485	525	555	88	595	650	630
Falls R nr Ashton 2	APR-JUL	285	315	340	86	365	400	395
	APR-SEP	365	405	430	91	455	500	475
Teton R nr Driggs	APR-JUL	113	133	148	101	166	195	146
	APR-SEP	143	170	190	107	210	245	178
Teton R nr St Anthony	APR-JUL	300	345	375	106	410	470	355
	APR-SEP	375	425	460	108	500	570	425
Henrys Fk nr Rexburg 2	APR-JUL	990	1,110	1,200	99	1,290	1,470	1,210
	APR-SEP	1,260	1,390	1,500	95	1,620	1,850	1,580
Willow Ck nr Ririe 2	APR-JUL	35	50	64	160	80	109	40
Portneuf R at Topaz	APR-JUL	52	62	68	136	75	85	50
	APR-SEP	67	79	86	132	95	106	65
Snake R at Neeley 2	APR-JUL	1,760	2,340	2,830	118	3,390	4,310	2,390
	APR-SEP	1,650	2,260	2,780	118	3,370	4,340	2,360

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025

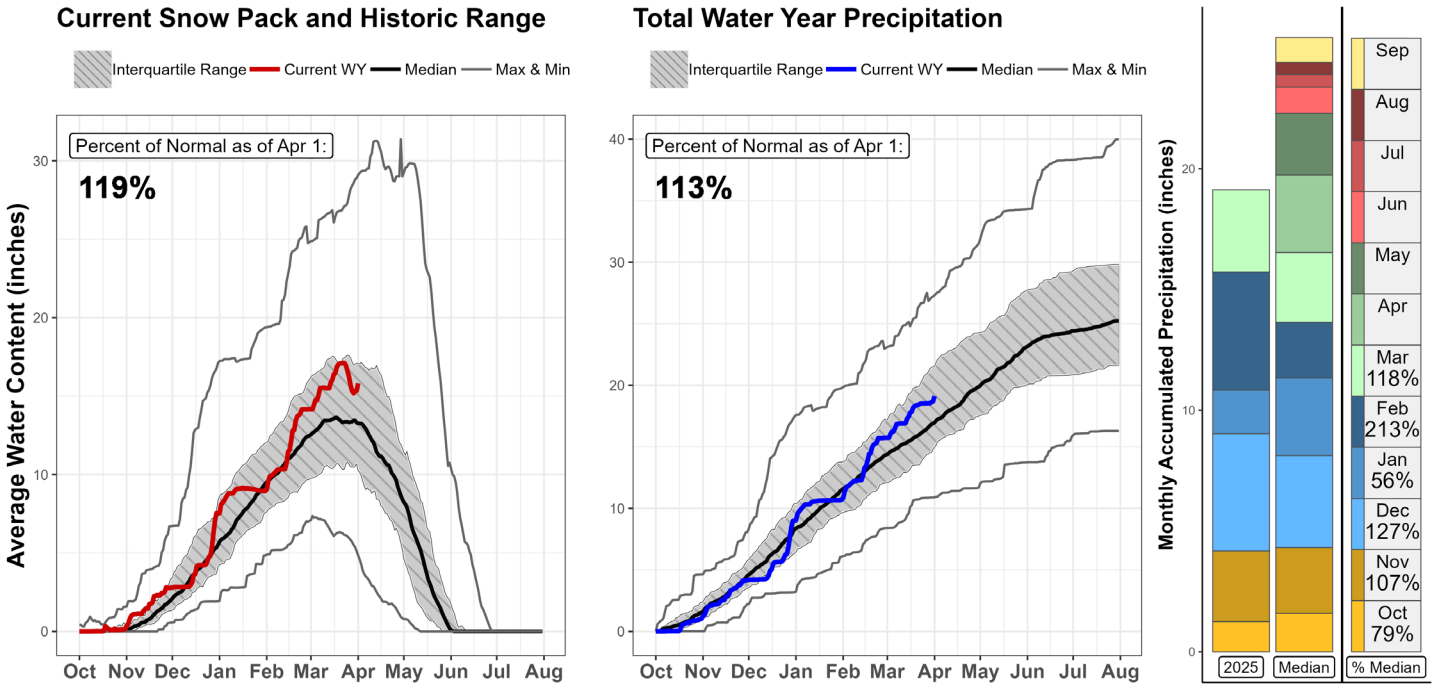
Reservoir Name	Current (KAF)	2024	Median (KAF)	Capacity (KAF)
Jackson Lake	645.0	630.4	627.0	847.0
Palisades Reservoir	1,094.6	1,291.0	803.3	1,400.0
Snake River Above Heise Total	**1,739.6**	**1,921.4**	**1,430.3**	**2,247.0**
Henrys Lake	85.0	85.4	85.0	90.4
Island Park Reservoir	123.5	123.8	109.3	135.2
Grassy Lake	11.9	13.4	13.2	15.2
Henrys Fork-Teton Total	**220.3**	**222.6**	**207.5**	**240.8**
Ririe Reservoir	57.3	56.8	48.7	80.5
American Falls Reservoir	1,602.9	1,643.0	1,498.0	1,672.6
Upper Snake River System Total	**3,620.0**	**4,137.3**	**3,383.1**	**4,577.9**
Blackfoot Reservoir		293.5	198.6	337.0

Watershed Snowpack Analysis - April 01, 2025

Basin Name	# of Sites	% of Median 2025	% of Median 2024
Henrys Fork-Teton	**19**	**99**	**102**
Henrys Fork-Falls River	13	97	96
Teton	9	102	110
Snake River Above Heise	**38**	**106**	**101**
Snake ab Jackson Lake	13	97	97
Pacific	4	103	99
Buffalo Fork	5	107	91
Gros Ventre	5	105	90
Hoback	5	112	97
Greys	5	118	104
Salt	6	120	120
Willow-Blackfoot-Portneuf	**17**	**121**	**142**
Willow	7	129	146
Blackfoot	6	124	141
Portneuf	7	114	137

Southern Snake Basins

April 1, 2025



WATER SUPPLY OUTLOOK

Frequent storms in the first weeks of March produced above normal snowpacks in the Southern Snake basins and well above normal month-to-date precipitation. Storms moving from west to east in the first week of March passed just south of the Southern Snake basins. These systems directed abundant precipitation into the region under southerly flow during the storms' evolution as they passed through Nevada's Great Basin. Another round of strong storm systems began passing through in the second week of March. These storm tracks were persistent and brought abundant moisture to the region, with the caveat that the system was warm and brought rain to lower elevations. Sites below 6,000 feet are melted out in the Owyhee Basin, with one site melting out about a week earlier than normal. Month-to-date precipitation was ~160 to 180% of normal up to March 20. However, after March 20 the region received little to no precipitation until March 31. March monthly precipitation is ~110 to 140% of normal (Fig. 1). Total water year precipitation for April 1 is ~100 to 120% of normal (Fig. 2). Snowpack for April 1 is ~105 to 130% of normal. Current snowpack projections for 30th percentile and above are showing persistent above normal snowpack conditions in the Owyhee Basin that should provide ample rafting opportunities on the Owyhee River.

For April 1, reservoir storage as a percent of normal: Lake Owyhee is 150%, Wildhorse is 185%, Oakley is 137%, and Salmon Falls is 85%. Streamflow forecasts for the Southern Snake River basins in their primary period are ~115 to 185% of normal (Fig 4). NOAA's Climate Prediction Center's 30-day outlook is showing equal chances of above or below normal precipitation and temperature for April.

Southern Snake Basins Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Goose Ck ab Trapper Ck nr Oakley	APR-JUL	9.8	13.7	17.1	128	21.0	28.0	13.4
	APR-SEP	10.4	14.8	18.7	134	23.0	31.0	14.0
Trapper Ck nr Oakley	APR-JUL	3.8	4.3	4.7	115	5.1	5.7	4.1
	APR-SEP	4.7	5.3	5.7	112	6.1	6.8	5.1
Oakley Reservoir Inflow	APR-JUL	13.6	18.1	22.0	126	26.0	33.0	17.5
	APR-SEP	16.3	21.0	25.0	131	30.0	36.0	19.1
Salmon Falls Ck nr San Jacinto	APR-JUL	51.0	65.0	75.0	134	87.0	106.0	56.0
	APR-SEP	54.0	67.0	78.0	134	89.0	108.0	58.0
Bruneau R at Rowland	APR-JUL	46.0	56.0	64.0	133	73.0	87.0	48.0
	APR-SEP	46.0	55.0	64.0	131	74.0	91.0	49.0
Jarbidge River Below Jarbidge	APR-JUL	18.4	22.0	24.0	122	27.0	32.0	19.6
	APR-SEP	19.0	22.0	25.0	125	28.0	32.0	20.0
Bruneau R nr Hot Spring	APR-JUL	154.0	187.0	215.0	137	245.0	300.0	157.0
	APR-SEP	158.0	191.0	220.0	135	250.0	300.0	163.0
Reynolds Ck at Tollgate	APR-JUL	6.2	7.5	8.7	136	10.0	11.9	6.4
	APR-SEP	6.6	8.1	9.1	142	10.2	12.2	6.4
Owyhee R nr Gold Ck 2	APR-JUL	18.8	25.0	30.0	174	34.0	40.0	17.2
Owyhee R nr Rome	APR-JUL	210.0	295.0	380.0	185	475.0	645.0	205.0
	APR-SEP	220.0	300.0	380.0	173	465.0	615.0	220.0
Owyhee R bl Owyhee Dam 2	APR-JUL	176.0	275.0	370.0	157	490.0	720.0	235.0
	APR-SEP	220.0	290.0	350.0	132	415.0	525.0	265.0

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025

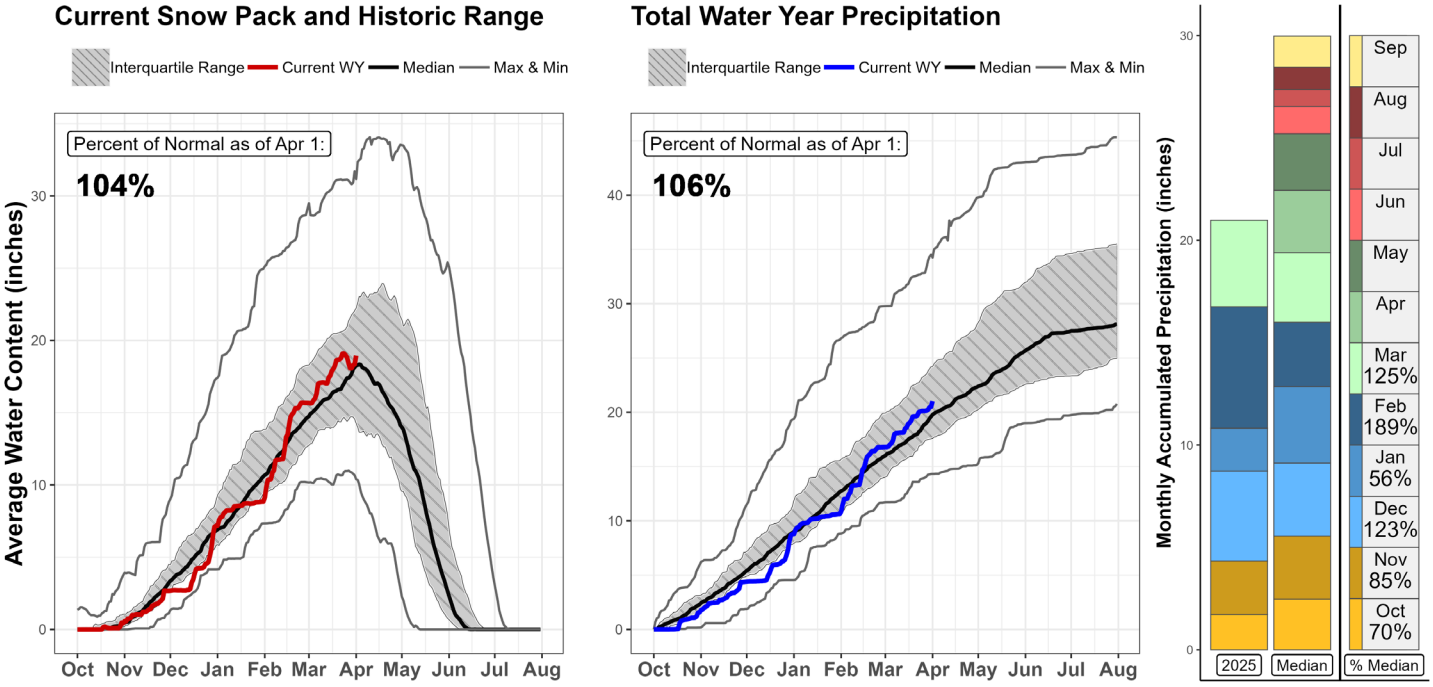
Reservoir Name	Current (KAF)	2024	Median (KAF)	Capacity (KAF)
Oakley Reservoir	36.6	32.6	26.6	75.6
Salmon Falls Reservoir	38.0	51.8	44.7	182.6
Wild Horse Reservoir	61.7	62.5	33.3	71.5
Lake Owyhee	692.0	649.5	460.0	715.0
Brownlee Reservoir	1,045.2	858.3	1,123.0	1,420.0

Watershed Snowpack Analysis - April 01, 2025

Basin Name	# of Sites	% of Median 2025	% of Median 2024
Raft	**6**	**104**	**128**
Goose Creek	**6**	**109**	**139**
Salmon Falls	**7**	**125**	**163**
Bruneau	**9**	**119**	**177**
Owyhee	**16**	**133**	**216**
Upper Owyhee	13	134	226
Reynolds	6	126	129

Bear River Basin

April 1, 2025



WATER SUPPLY OUTLOOK

Continuing the wetter than normal year, the Bear River Basin received ~125% normal precipitation during March (Fig. 1). Total water year precipitation as of April 1 is ~105% of normal (Fig. 2). Although there was basin-wide snowmelt between March 25 and 29, the snowpack rebounded by April 1 and is currently ~105% of normal (Fig. 3). This basin usually reaches peak SWE on April 7, and April 1 snowpack is ~90% of that median peak. Projected SWE accumulation chart suggests the Bear River Basin would need above normal snow accumulation conditions over the next week (between the 70th and 90th percentile for the period of record) to reach the median peak total of 20.6" SWE. NOAA's 6 to 10-day outlook predicts above normal temperatures and below normal precipitation, so it appears likely that this basin may fall short of the median peak SWE if warmer temperatures come to fruition and persist.

For April 1, Bear Lake reservoir storage is well above normal at 186% (73% capacity). A full storage allocation is expected this year. The April 1 streamflow forecasts in the Bear River Basin are 108 to 143% of normal for the primary runoff period (Fig. 4).

Bear Basin Streamflow Forecasts - April 01, 2025

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	**Forecast Period**	**90% (KAF)**	**70% (KAF)**	**50% (KAF)**	**% Median**	**30% (KAF)**	**10% (KAF)**	**30yr Med (KAF)**
Bear R nr UT-WY State Line	APR-JUL	80.0	94	105	104	117.0	135.0	101.0
	APR-SEP	87.0	102	115	101	128.0	147.0	114.0
Bear R ab Resv nr Woodruff	APR-JUL	66.0	88	106	115	128.0	164.0	92.0
	APR-SEP	73.0	98	119	120	144.0	189.0	99.0
Big Ck nr Randolph	APR-JUL	1.9	3	4	125	5.1	7.5	3.2
Smiths Fk nr Border	APR-JUL	71.0	83	93	108	103.0	117.0	86.0
	APR-SEP	81.0	93	103	103	115.0	132.0	100.0
Bear R bl Stewart Dam 2	APR-JUL	72.0	125	165	143	205.0	270.0	115.0
	APR-SEP	75.0	130	166	136	220.0	345.0	122.0

Normals based on 1991-2020 reference period: streamflow, snowpack, precipitation, & reservoir normals are medians.

1) 90% and 10% exceedance probabilities are actually 95% and 5%

2) Forecasts are for unimpaired flows. Actual flow will be dependent on management of upstream reservoirs and diversions

Reservoir Storage (KAF): April 01, 2025

Reservoir Name	Current (KAF)	2024	Median (KAF)	Capacity (KAF)
Bear Lake	948.4	922.7	510.6	1,302.0
Woodruff Creek	2.3	3.5	3.8	4.0
Woodruff Narrows Reservoir	43.7	48.8	49.8	57.3

Watershed Snowpack Analysis - April 01, 2025

Basin Name	# of Sites	% of Median 2025	2024
Bear	**29**	**106**	**123**
Smiths-Thomas Forks	5	111	112
Bear Lake	12	108	124
Mink	3	115	122
Cub	3	112	124
Malad	3	104	141

Streamflow Adjustment List for All Forecasts Published in Idaho Water Supply Outlook Report: Streamflow forecasts are projections of runoff volumes that would occur without influences from upstream reservoirs or diversions. These values are referred to as natural, unregulated or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and inter-basin transfers are added or subtracted from the observed (actual) streamflow volumes. The following list documents the adjustments made for each forecast point. **(Revised Dec. 2018).**

Panhandle Region

Kootenai R at Leonia, MT (2)
+ Lake Koocanusa storage change

Moyie R at Eastport – no corrections

Boundary Ck nr Porthill – no corrections

Clark Fork R bl Cabinet Gorge (2)
+ Hungry Horse storage change
+ Flathead Lake storage change
+ Noxon Res storage change
Whitehorse Rapid gage used create longer term record

Pend Oreille Lake Inflow (2)
+ Pend Oreille R at Newport, WA
+ Hungry Horse Res storage change
+ Flathead Lake storage change
+ Noxon Res storage change
+ Lake Pend Oreille storage change
+ Priest Lake storage change

Priest R nr Priest R (2)
+ Priest Lake storage change

NF Coeur d' Alene R at Enaville - no corrections

St. Joe R at Calder- no corrections

Spokane R nr Post Falls (2)
+ Lake Coeur d' Alene storage change

Spokane R at Long Lake, WA (2)
+ Lake Coeur d' Alene storage change
+ Long Lake, WA storage change

Clearwater River Basin

Selway R nr Lowell - no corrections

Lochsa R nr Lowell - no corrections

Dworshak Res Inflow (2)
+ Clearwater R nr Peck
- Clearwater R at Orofino
+ Dworshak Res storage change

Clearwater R at Orofino - no corrections

Clearwater R at Spalding (2)
+ Dworshak Res storage change

Salmon River Basin

Salmon R at Salmon - no corrections

Lemhi R nr Lemhi – no corrections

MF Salmon R at MF Lodge – no corrections
SF Salmon gage used to create longer term record

SF Salmon R nr Krassel Ranger Station – no corrections

Johnson Creek at Yellow pine – no corrections

Salmon R at White Bird - no corrections

West Central Basins

Boise R nr Twin Springs - no corrections

SF Boise R at Anderson Ranch Dam (2)
+ Anderson Ranch Res storage change

Mores Ck nr Arrowrock Dam – no corrections

Boise R nr Boise (2)
+ Anderson Ranch Res storage change
+ Arrowrock Res storage change
+ Lucky Peak Res storage change

SF Payette R at Lowman - no corrections

Deadwood Res Inflow (2)
+ Deadwood R bl Deadwood Res nr Lowman
+ Deadwood Res storage change

Lake Fork Payette R nr McCall – no corrections

NF Payette R at Cascade (2)
+ Payette Lake storage change
+ Cascade Res storage change

NF Payette R nr Banks (2)
+ Payette Lake storage change
+ Cascade Res storage change

Payette R nr Horseshoe Bend (2)
+ Deadwood Res storage change
+ Payette Lake storage change
+ Cascade Res storage change

Weiser R nr Weiser - no corrections

Wood and Lost Basins

Little Lost R bl Wet Ck nr Howe - no corrections

Big Lost R at Howell Ranch - no corrections

Big Lost R bl Mackay Res nr Mackay (2)
+ Mackay Res storage change

Little Wood R ab High Five Ck – no corrections

Little Wood R nr Carey (2)
+ Little Wood Res storage change

Big Wood R at Hailey - no corrections

Big Wood R ab Magic Res (2)
+ Big Wood R nr Bellevue (1912-1996)
+ Big Wood R at Stanton Crossing nr Bellevue (1997 to present)
+ Willow Ck (1997 to present)

Camas Ck nr Blaine – no corrections

Magic Res Inflow (2)
+ Big Wood R bl Magic Dam
+ Magic Res storage change

Upper Snake River Basin

Falls R nr Ashton (2)
+ Grassy Lake storage change
+ Diversions from Falls R ab nr Ashton

Henrys Fork nr Ashton (2)
+ Henrys Lake storage change
+ Island Park Res storage change

Teton R nr Driggs - no corrections

Teton R nr St. Anthony (2)
- Cross Cut Canal into Teton R
+ Sum of Diversions for Teton R ab St. Anthony
+ Teton Dam for water year 1976 only

Henrys Fork nr Rexburg (2)
+ Henrys Lake storage change
+ Island Park Res storage change
+ Grassy Lake storage change
+ 3 Diversions from Falls R ab Ashton-Chester
+ 6 Diversions from Falls R abv Ashton
+ 7 Diversions from Henrys Fk btw Ashton to St. Anthony
+ 21 Diversions from Henrys Fk btw St. Anthony to Rexburg
Snake R nr Flagg Ranch, WY – no corrections
Snake R nr Moran, WY (2)
+ Jackson Lake storage change
Pacific Ck at Moran, WY - no corrections
Buffalo Fork ab Lava nr Moran, WY - no corrections
Snake R ab Res nr Alpine, WY (2)
+ Jackson Lake storage change
Greys R nr Alpine, WY - no corrections
Salt R nr Etna, WY - no corrections
Palisades Res Inflow (2)
+ Snake R nr Irwin
+ Jackson Lake storage change
+ Palisades Res storage change
Snake R nr Heise (2)
+ Jackson Lake storage change
+ Palisades Res storage change
Ririe Res Inflow (2)
+ Willow Ck nr Ririe
+ Ririe Res storage change
The forecasted natural volume for Willow Creek nr Ririe does not include Grays Lake water diverted from Willow Creek drainage through the Clarks Cut diversion and into Blackfoot Reservoir.
Blackfoot R ab Res nr Henry (2)
+ Blackfoot Res storage change
The forecasted Blackfoot Reservoir Inflow includes Grays Lake water diverted from the Willow Creek drainage through the Clarks Cut diversion and into Blackfoot Reservoir.
Portneuf R at Topaz - no corrections
American Falls Res Inflow (2)
+ Snake R at Neeley
+ Jackson Lake storage change
+ Palisades Res storage change
+ American Falls storage change
+ Teton Dam for water year 1976 only

Southside Snake River Basins

Goose Ck nr Oakley - no adjustments
Trapper Ck nr Oakley - no adjustments
Oakley Res Inflow - *flow does not include Birch Creek*
+ Goose Ck
+ Trapper Ck
Salmon Falls Ck nr San Jacinto, NV - no corrections
Bruneau R nr Hot Springs - no corrections
Reynolds Ck at Tollgate - no corrections
Owyhee R nr Gold Ck, NV (2)
+ Wildhorse Res storage change
Owyhee R nr Rome, OR – no Corrections
Owyhee Res Inflow (2)
+ Owyhee R bl Owyhee Dam, OR
+ Lake Owyhee storage change
+ Diversions to North and South Canals

Bear River Basin

Bear R nr UT-WY Stateline, UT- no corrections
Bear R abv Res nr Woodruff, UT- no corrections
Big Ck nr Randolph, UT - no corrections
Smiths Fork nr Border, WY - no corrections
Bear R bl Stewart Dam (2)
+ Bear R bl Stewart Dam
+ Rainbow Inlet Canal
Little Bear R at Paradise, UT - no corrections
Logan R nr Logan, UT - no corrections
Blacksmith Fk nr Hyrum, UT - no corrections

Reservoir Capacity Definitions (Units in 1,000 Acre-Feet, KAF)

Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. This table lists the volumes for each reservoir, and defines the storage volumes NRCS uses when reporting capacity and current reservoir storage. In most cases, NRCS reports usable storage which includes active and/or inactive storage. **(Revised Feb. 2015)**

Basin- Lake or Reservoir	Dead Storage	Inactive Storage	Active Storage	Surcharge Storage	NRCS Capacity	NRCS Capacity Includes
Panhandle Region						
Hungry Horse	39.73	---	**3451.00**	---	**3451.0**	Active
Flathead Lake	Unknown	---	**1791.00**	---	**1791.0**	Active
Noxon	Unknown	---	**335.00**	---	**335.0**	Active
Lake Pend Oreille	**406.20**	**112.40**	**1042.70**	**---**	**1561.3**	Dead + Inactive + Active
Lake Coeur d'Alene	Unknown	13.50	**225.00**	**---**	**238.5**	Inactive + Active
Priest Lake	**20.00**	**28.00**	**71.30**	**---**	**119.3**	Dead + Inactive + Active
Clearwater Basin						
Dworshak	Unknown	**1452.00**	**2016.00**	**---**	**3468.0**	Inactive + Active
West Central Basins						
Anderson Ranch	24.90	**37.00**	**413.10**	---	450.1	Inactive + Active
Arrowrock	Unknown	---	**272.20**	**---**	**272.2**	Active
Lucky Peak	Unknown	**28.80**	**264.40**	13.80	**293.2**	Inactive + Active
Lake Lowell	7.90	**5.80**	**159.40**	---	165.2	Inactive + Active
Deadwood	Unknown	---	**161.90**	**---**	**161.9**	Active
Cascade	Unknown	**46.70**	**646.50**	**---**	**693.2**	Inactive + Active
Mann Creek	1.61	0.24	**11.10**	**---**	**11.1**	Active
Wood and Lost Basins						
Mackay	0.13	---	**44.37**	**---**	**44.4**	Active
Little Wood	Unknown	---	**30.00**	**---**	**30.0**	Active
Magic	Unknown	---	**191.50**	**---**	**191.5**	Active
Upper Snake Basin						
Jackson Lake	Unknown	---	**847.00**	**---**	**847.0**	Active
Palisades	44.10	**155.50**	**1200.00**	**---**	**1400.0**	Dead +Inactive +Active
Henrys Lake	Unknown	---	**90.40**	**---**	**90.4**	Active
Island Park	0.40	---	**127.30**	**7.90**	**135.2**	Active + Surcharge
Grassy Lake	Unknown	---	**15.18**	**---**	**15.2**	Active
Ririe	4.00	6.00	**80.54**	10.00	**80.5**	Active
Blackfoot	0.00	---	**333.50**	3.50	**333.50**	Active (rev. 2/1/2015)
American Falls	Unknown	---	**1672.60**	**---**	**1672.6**	Active
Southside Snake Basins						
Oakley	0.00	---	**75.60**	**---**	**75.6**	Active
Salmon Falls	48.00	**5.00**	**182.65**	**---**	**182.6**	Active
Wild Horse	Unknown	---	**71.50**	**---**	**71.5**	Active
Lake Owyhee	406.83	---	**715.00**	**---**	**715.0**	Active
Brownlee	0.45	**444.70**	**975.30**	**---**	**1420.0**	Inactive + Active
Bear River Basin						
Bear Lake	5000.00	119.00	**1302.00**	**---**	**1302.0**	Active:
Capacity does not include 119 KAF that can be used, historic values below this level are rounded to zero						
Montpelier	**0.21**	**---**	**3.84**	**---**	**4.0**	Dead + Active

Interpreting Water Supply Forecasts

Each month, five forecasts are issued for each forecast point and each forecast period. Unless otherwise specified, all streamflow forecasts are for streamflow volumes that would occur naturally without any upstream influences. Water users need to know what the different forecasts represent if they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts.

90 Percent Chance of Exceedance Forecast. There is a 90 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 10 percent chance that the actual streamflow volume will be less than this forecast value.

70 Percent Chance of Exceedance Forecast. There is a 70 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 30 percent chance that the actual streamflow volume will be less than this forecast value.

50 Percent Chance of Exceedance Forecast. There is a 50 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 50 percent chance that the actual streamflow volume will be less than this forecast value. Generally, this forecast is the middle of the range of possible streamflow volumes that can be produced given current conditions.

30 Percent Chance of Exceedance Forecast. There is a 30 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 70 percent chance that the actual streamflow volume will be less than this forecast value.

10 Percent Chance of Exceedance Forecast. There is a 10 percent chance that the actual streamflow volume will exceed this forecast value, and there is a 90 percent chance that the actual streamflow volume will be less than this forecast value.

*Note: There is still a 20 percent chance that actual streamflow volumes will fall either below the 90 percent exceedance forecast or above the 10 percent exceedance forecast.

These forecasts represent the uncertainty inherent in making streamflow predictions. This uncertainty may include sources such as: unknown future weather conditions, uncertainties associated with the various prediction methodologies, and the spatial coverage of the data network in a given basin.

30-Year Median. The 30-year median streamflow for each forecast period is provided for comparison. The median is based on data from 1991-2020. The % Median. column compares the 50% chance of exceedance forecast to the 30-year median streamflow; values above 100% denote when the 50% chance of exceedance forecast would be greater than the 30-year median streamflow.

AF - Acre-feet, forecasted volume of water are typically in thousands of acre-feet (KAF).

These forecasts are given to users to help make risk-based decisions. Users can select the forecast corresponding to the level of risk they are willing to accept in order to minimize the negative impacts of having more or less water than planned for.

To Decrease the Chance of Having Less Water than Planned for
A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive less than this amount). To reduce the risk of having less water than planned for, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded such as the 90 or 70 percent exceedance forecasts.

To Decrease the Chance of Having More Water than Planned for
A user might determine that making decisions based on a 50 percent chance of exceedance forecast is too much risk to take (there is still a 50% chance that the user will receive more than this amount). To reduce the risk of having more water than planned for, users can base their operational decisions on one of the forecasts with a lesser chance of being exceeded such as the 30 or 10 percent exceedance forecasts.

<u>Forecast use example:</u>

Using the 50 Percent Exceedance Forecast. Using the example forecasts shown on the next page, there is a 50% chance that actual streamflow volume at the Boise River near Twin Springs will be less than 675 KAF between April 1 and Sept. 30. There is also a 50% chance that actual streamflow volume will be greater than 675 KAF.

Using the 90 and 70 Percent Exceedance Forecasts. If an unexpected shortage of water could cause problems (such as irrigated agriculture), users might want to plan on receiving 605 KAF during April 1 through September 30 (from the 70 percent exceedance forecast). There is a 30% chance of receiving *less* than 605 KAF.

Alternatively, if users determine the risk of using the 70 percent exceedance forecast is too great, then they might plan on receiving 520 KAF (from the **90** percent exceedance forecast). There is 10% chance of receiving less than 520 KAF.

Using the 30 or 10 Percent Exceedance Forecasts. If an unexpected excess of water could cause problems (such as operating a flood control reservoir), users might plan on receiving 750 KAF between April 1 and Sept. 30 (from the 30 percent exceedance forecast). There is a 30% chance of receiving *more* than 750 KAF.

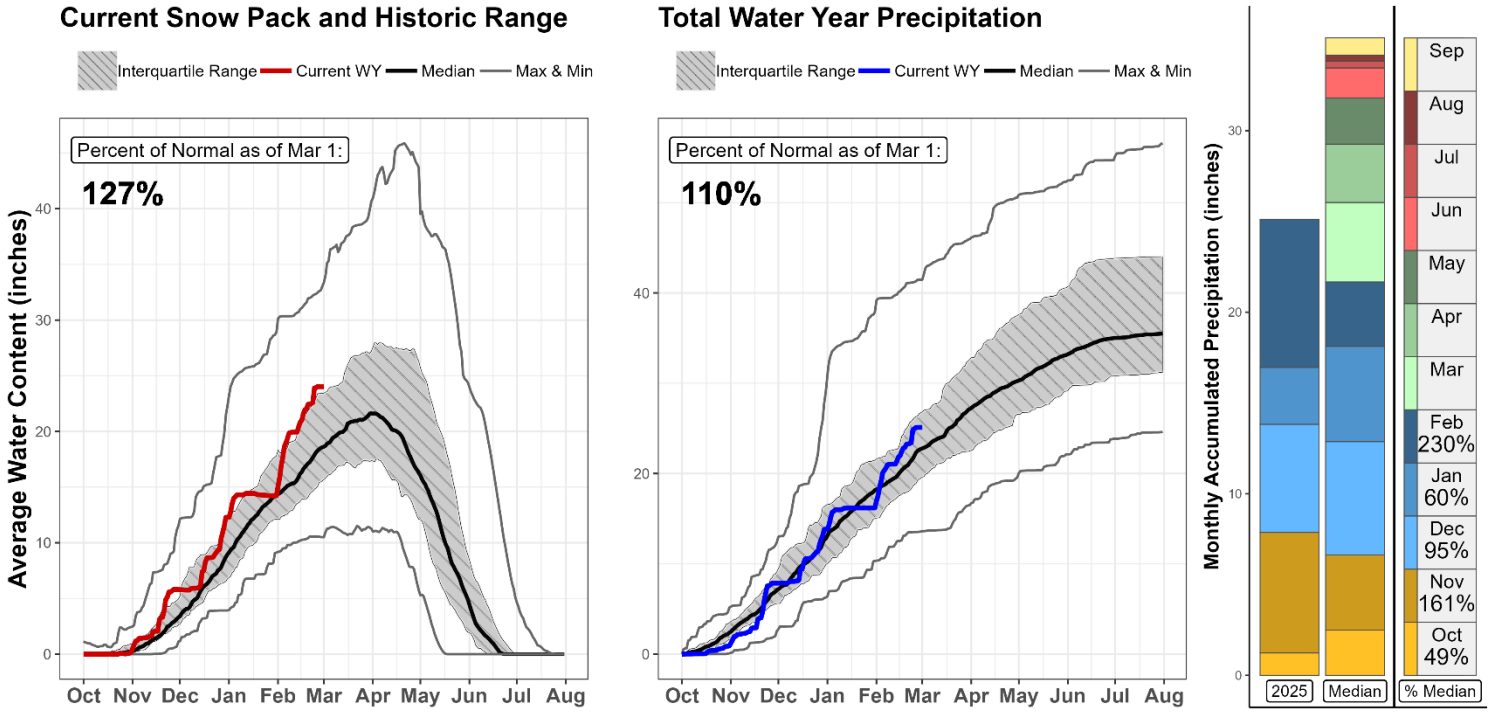
Alternatively, if users determine the risk of using the 30 percent exceedance forecast is too great, then they might plan on receiving 850 KAF (from the 10 percent exceedance forecast). There is a 10% chance of receiving more than 850 KAF. Users could also choose a volume in between any of these values to reflect their desired risk level.

		Forecast Exceedance Probabilities for Risk Assessment <=== Drier ===== Projected Volume ===== Wetter ===>						
Forecast Point	Forecast Period	90% (KAF)	70% (KAF)	50% (KAF)	% Median	30% (KAF)	10% (KAF)	30yr Med (KAF)
Boise R nr Twin Springs	APR-JUL	465	550	635	106	710	825	600
	APR-SEP	520	605	675	105	750	850	645

Interpreting Snowpack & Precipitation Plots

Basin snowpack plots represent snow water equivalent indices using the average daily SNOTEL data[1] from several sites in or near individual basins. The solid red line, which represents the current water year snowpack water content, can be compared to the normal black line (Median) which is considered "normal", as well as the SNOTEL observed historical snowpack range for each basin. This allows users to gather important information about the current year's snowpack as well as the historical variability of snowpack in each basin.

The gray shaded area represents the interquartile range which is the 25th to 75th percentiles of the historical daily snowpack data for each basin for its period of record. Percentiles depict the value of the average snowpack below which the given percent of historical years fall. For example, the top part of the interquartile range (75th percentile) indicates that the snowpack index has



been below this line for 75 percent of the period of record, whereas the reverse is true for the lower part of the interquartile range (25th percentile). This means 50 percent of the time the snowpack index is within the interquartile range (gray area) during the period of record. The maximum and minimum gray lines indicate the maximum and minimum amounts of snow that have been measured across the SNOTEL stations in the basin group on that date.

The basin total water year precipitation plots are similar to the snowpack plots. The blue line represents the current water year, and the black line represents the 30-year median for the basin group which is considered 'normal' for that area. Total water year precipitation is all of the of precipitation that has fallen since the start of the water year on October 1. It includes both rain and snow and all other forms of precipitation. It is a useful metric for evaluating how wet or dry a basin is each year. The gray shaded area represents the interquartile range, and the maximum and minimum lines represent the maximum and minimum amount of precipitation recorded in the basin during the period of record. The monthly accumulated precipitation plot represents how much precipitation has fallen each month compared to the 30-year median. Each month is denoted by a separate color and the monthly precipitation total in that basin is listed as a percent of normal precipitation adjacent to the graph.

[1] All data used for these plots come from daily SNOTEL data only and does not include snow course data (collected monthly), whereas the official basin snowpack percent of normal includes both SNOTEL and snow course data, potentially leading to slight discrepancies between plots and official basin percent of normal.

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This publication is dedicated to the people, agencies and organizations utilizing this data, information and forecasts for short and long term water management, planning, preparation, recreation and otherwise, for the enhancement of the economy and enrichment of livelihoods.